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ABSTRACT

Survey activities are reported which were designed to provide the foundation for a national evaluation of the effectiveness of programs assisted under the Career Education Incentive Act of 1977 (PL 95-207). The methodology described, called "program evaluability assessment," focuses on detailed analysis of program assumptions in order to clarify objectives of the career education program, identify elements of the functional program model, and identify the basis for the future national evaluation. Three separate efforts are reported: (1) telephone interviews with twenty-six members of stakeholder groups (e.g., educational organizations, business, industry and community groups, and fourteen State Career Education Coordinators); (2) detailed review of each of the fifty-three State Career Education Plans (FY80) received by the Office of Career Education; and (3) site visits to ten states to examine actual funding mechanisms and activities. Findings, which revealed discrepancies between intended and actual program, are discussed in relationship to program accountability and flow of funds, and direct and indirect program interventions. Measurement models (based on the finding that the program is "evaluable") are presented in a table listing the following information for each of forty major activity-outcome linkages: key actor (organization/group), activity, intended outcome, measures, data source, quantifiability, potency, and collection/processing effort. Appendixes contain detailed analyses of state plans, notable examples of state leadership activities, and measurement models for seventy-three elements (for use by managers of state and local programs. (JT)

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IMPLEMENTATION OF THE CAREER EDUCATION INCENTIVE ACT

First Interim Report on the Evaluability Assessment

Submitted to:

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and
The Office of Career Education
U.S. Office of Education
Department of Education

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U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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Prologue

Career education began in 1971 as a reform movement rather than a program. As such, it represented not so much a new educational "treatment" as a new way of viewing education. In fact, during the early 1970's, career education was intentionally left undefined by the U.S. Office of Education (USOE) to permit local educators wide discretion in evolving their own career education concepts.

During the mid-70s, however, a set of programmatic assumptions emerged that, taken together, was thought to represent a rough operational definition of career education. Based on the writings of Dr. Kenneth Hoyt, Director of the USOE Office of Career Education (OCE), Table 1 on the next two pages lists 25 of the key assumptions underlying this definition, and Table 2 contains nine major "learner outcomes" that were expected to result from exposure to career education.

Passage of Public Law 95-207

The Career Education Incentive Act of 1977 (PL 95-207) was the only free standing education law (i.e., not part of an omnibus, multititled law) passed during the 1970s. It won the support of an overwhelming Congressional majority against the will of the President. The legislative history suggests that the strong support of business, industry, and labor interests, combined with the personal commitment of two respected Congressmen (Senator Hathaway of Maine and Representative Perkins of Kentucky), were more influential in the passage of PL 95-207 than were any efforts by the educational community.

The expressed purposes of the Act directly reflected the goals and assumptions articulated by Dr. Hoyt immediately prior to its passage. They stated that:

> In recognition of the prime importance of work in our society and in recognition of the role that the schools play in the lives of all Americans, it is the purpose of this Act to assist States and local educational agencies and institutions of postsecondary education, including collaborative arrangements with the appropriate agencies and organizations, in making education as preparation for work, and as a means of relating work values to other life roles and choices (such as family life), a major goal of all who teach and all who learn by increasing the emphasis they place on career awareness, exploration, decisionmaking, and planning,

Table 1

Programmatic Assumptions of Career Education (Hoyt, 1975)

1. If students can see relationships between what they are being asked to learn in school and the world of work, they will be motivated to learn more in school.

2. No single learning strategy exists that is best for all students. For example, some students will learn best by reading books, and others will learn best by combining reading with other kinds of learning activities. A comprehensive educational program should provide a series of alternative learning strategies and learning environments for students.

3. Basic academic skills, a personally meaningful set of work values, and good work habits represent adaptability tools needed by all persons who choose to work in today's rapidly changing occupational society.

4. Increasingly, entry into today's occupational society demands that those who seek employment possess a specific set of vocational skills. Unskilled labor is less and less in demand.

5. Career development, as part of human development, begins in the preschool years and continues into the retirement years. Its maturational patterns differ from individual to individual.

6. Work values, a part of one's personal value sytem, are developed to a significant degree during the elementary school years and are modifiable during those years.

7. Specific occupational choices represent only one of a number of kinds of choices involved in career development. They can be expected to increase in realism as one moves from childhood into adulthood and, to some degree, to be modifiable during most of one's adult years.

8. Occupational decisionmaking is accomplished through the dynamic interaction of limiting and enhancing factors both within the individual and in his present and proposed environment. It is not, in any sense, a simple matching of individuals with jobs.

9. Occupational stereotyping hinders full freedom of occupational choice both for females and for minority persons. These restrictions can be reduced, to some extent, through programmatic intervention strategies begun in the early childhood years.

10. Parent socioeconomic status acts as a limitation on occupational choices considered by children. This limitation can be reduced, to a degree, by program intervention strategies begun in the early years.

11. A positive relationship exists between education and occupational competence, but the optimum amount and kind of education required as preparation for work varies greatly from occupation to occupation.

12. The same general strategies utilized in reducing worker alienation in industry can be used to reduce worker alienation among pupils and teachers in the classroom.

13. While some persons will find themselves able to meet their human needs for accomplishment through work in their places of paid employment, others will find it necessary to meet this need through work in which they engage during their leisure time.

6

Table 1

(continued)

14. Career decisionmaking skills, job-hunting skills, and job-getting skills can be taught to and learned by almost everyone. Individuals can effectively use such skills, once learned, to enhance their career development.

15. Excessive deprivation in any aspect of human growth and development can retard career development. For persons suffering such deprivation, special variations in career development programs will be required.

16. An effective means of helping individuals discover both who they are (in a self-concept sense) and why they are (in a personal awareness sense) is through helping them discover what they can accomplish in the work they do.

17. The attitudes of parents toward work and toward education act as powerful influences on the career development of their children. Such parental attitudes are modifiable through programmatic intervention strategies.

18. The processes of occupational decisionmaking and occupational preparation will probably be repeated more than once for most adults in today's society.

19. One's style of living is significantly influenced by the occupations he or she engages in at various times in life.

20. Relationships between education and work can be made more meaningful through infusion into subject matter than if taught as a separate body of knowledge.

21. It can increasingly be expected that education and work will be interwoven at various times in the lives of most individuals rather than occur in a single sequential pattern.

22. Decisions individuals make about the work they do are considerably broader and more encompassing in nature than are decisions made regarding the occupations in which they are employed.

23. Good work habits and positive attitudes toward work can be taught effectively to most individuals. Assimilation of such knowledge is most effective if begun in the early childhood years.

24. The basis on which work can become a personally meaningful part of one's life will vary greatly from individual to individual. No single approach can be expected to meet with universal success.

25. While economic return can almost always be expected to be a significant factor in decisions individuals make about occupations, it may not be a significant factor in many decisions individuals make about their total pattern of work.

Table 2

Major Learner Outcomes Associated with Career Education (Hoyt, 1977)

1. Competent in the basic academic skills required for adaptability in our rapidly changing society.
2. Equipped with good work habits.
3. Equipped with a personally meaningful set of work values that foster in them a desire to work.
4. Equipped with career decision-making skills, job-hunting skills, and job-getting skills.
5. Equipped with a degree of self-understanding and understanding of educational-vocational opportunities sufficient for making sound career decisions.
6. Aware of means available to them for continuing and recurrent education.
7. Either placed or actively seeking placement in a paid occupation, in further education, or in a vocation consistent with their current career decisions.
8. Actively seeking to find meaning and meaningfulness through work in productive use of leisure time.
9. Aware of means available to themselves for changing career options--of societal and personal constraints impinging on career alternatives.

> and to do so in a manner which will promote equal opportunity in making career choices through the elimination of bias and stereotyping in such activities, including bias and stereotyping on account of race, sex, age, economic status, or handicap. (Public Law 95-207)

Congress expressed no concerns that these purposes might be too ambitious for any educational program, let alone one with relatively modest funding authorizations.[1] Career education supporters were apparently convinced by the testimony of expert state and local career education practitioners that career education was a proven mechanism whose only major need was wider implementation. The law authorized a five year program of decreasing federal incentives to bring about this wider implementation.

PL 95-207 also provided funds for "a national evaluation of the effectiveness of programs assisted under this Act in carrying out the purposes of this Act..." (Section 5(a) (2) (C)).

This interim report represents the first product of a contract awarded by the U.S. Office of Education (USOE) to provide the foundation for such a national evaluation. In AIR's proposal to conduct this study, we stated our intent to utilize a new evaluation approach that would take into account the severe limitations of conventional program impact evaluations. We now describe this approach.

Program Evaluability Assessment--A More Useful Approach

"Evaluability assessment" is a term coined by Joseph Wholey (now DHEW Deputy Assistant Secretary for Planning and Evaluation) and his colleagues to define an evaluation approach that requires more detailed analyses of program assumptions than are required by conventional approaches. Done prior to large scale impact assessments, evaluability assessment is meant to ensure that the program under study is *ready* for more rigorous evaluation. It requires that: (1) intended program objectives and activities be clearly specified and accepted by both policymakers and program managers; (2) causal assumptions underlying the program be explicitly stated; (3) acceptable performance indicators be identified; and (4) intended uses of the evaluation's results be agreed upon by the potential users.

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[1] Authorizations for the basic program are $50 million in FY79, $100 million in FY80 and 81, $50 million in FY82 and $25 million for FY83. In addition, a postsecondary demonstration program was authorized at $15 million per year for fiscal years 79-83. Actual appropriations for FY79 and FY80 were $20 million, and the postsecondary demonstration program has not been funded at all. Of the $20 million appropriated in FY79, $18.7 million were awarded to states. See Appendix C for a state-by-state listing of these awards.

There are normally two phases to an evaluability assessment: the *descriptive* phase and the *analytic* phase. In the first phase, documents are reviewed and policymakers and program managers are interviewed about the objectives of the program, its planned operations, and its probable effectiveness in meeting its intended objectives. The purpose is to prepare a detailed description of the *intended* program. This description is then augmented by futher explorations, including visits to participating sites, to obtain a description of the *actual* program in operation.

Early in the descriptive phase, program models are prepared. According to Wholey, these models may take three different forms:

- *logic* models represent the underlying causal assumptions that direct the program's operations to the attainment of its intended outcomes;
- *function* models are more detailed, tracing the flow of intended and actual program inputs, activities, and processes from their origins to their point of impact on recipient populations; and
- *measurement* models identify indicators that can be obtained at various points in the logic and function models to measure program performance.

The second analytic phase of an evaluability assessment is based largely on the results of the first phase. In this phase, the evaluators examine any discrepancies discovered between: (1) the intended program as seen by policymakers and as seen by program managers, and (2) the intended and the actual program. The evaluators also examine the plausibility of the program's logic and feasibility of measuring its performance at those points deemed by the evaluation's users to be most critical. In an ongoing dialogue with the program managers, various options may be discussed regarding the implications of the plausibility and feasibility analyses for the future of the assessment. In past reported cases, joint decisions to terminate evaluations have resulted from findings that a program's objectives are unclear, its intended activities are not in place or are insufficient to achieve its objectives, or critical evaluation data are unavailable or are too expensive to obtain. In less extreme cases, program objectives have been sharpened, program activities have been modified, and new data reporting mechanisms have been put in place. The preliminary models prepared during the descriptive phase have been altered as the analyses proceeded. The result has been an improved ability to proceed with the evaluation. This is AIR's goal in conducting evaluability assessment for PL 95-207.

Description of the PL 95-207 Program

In its most simplified form, the logic of the intended Career Education Incentive Act program is indicated in Figure 1 on the next page. This intended "flow" of inputs (funds, technical assistance), activities, and intended learner outcomes is stated directly in or has been inferred from the language of PL 95-207 and its legislative hearings. But the boxes and lines in Figure 1 do not adequately define the full range of objectives and intended linkages that have been articulated by the program's managers, such as officials in the USOE Office of Career Education (OCE). As a result, the Figure 1 logic model does not provide an adequate basis for building a description of the PL 95-207 program. To complete the logic model, it was necessary to turn again to the career education literature. Figure 2 illustrates a more complex logic model, showing the main roles and relationships of the intended PL 95-207 program. This complete model will serve as the basis for the detailed function and measurement models to be discussed later in this report.

Following construction of this logic model, AIR staff conducted three separate efforts aimed at further clarifying the objectives of the career education program, identifying elements of the functional program model, and focusing on the most important and appropriate events upon which a future national evaluation of career education implementation might be based.

Stakeholder Interviews

The first effort represented an attempt to incorporate the perceptions and experiences of individuals other than OCE officials who have been involved in various capacities in developing and/or implementing the PL 95-207 program. This seemed especially important since the logic model dictated the participation of so many non-federal participants in completing the implementation of PL 95-207. To this end, AIR staff members conducted informal telephone interviews with 26 members of various career education stakeholder groups (e.g., educational organizations, business, industry, and community groups that had testified in favor of PL 95-207) and 14 State Career Education Coordinators. The specific stakeholder groups and state coordinators contacted are listed in Appendix A.

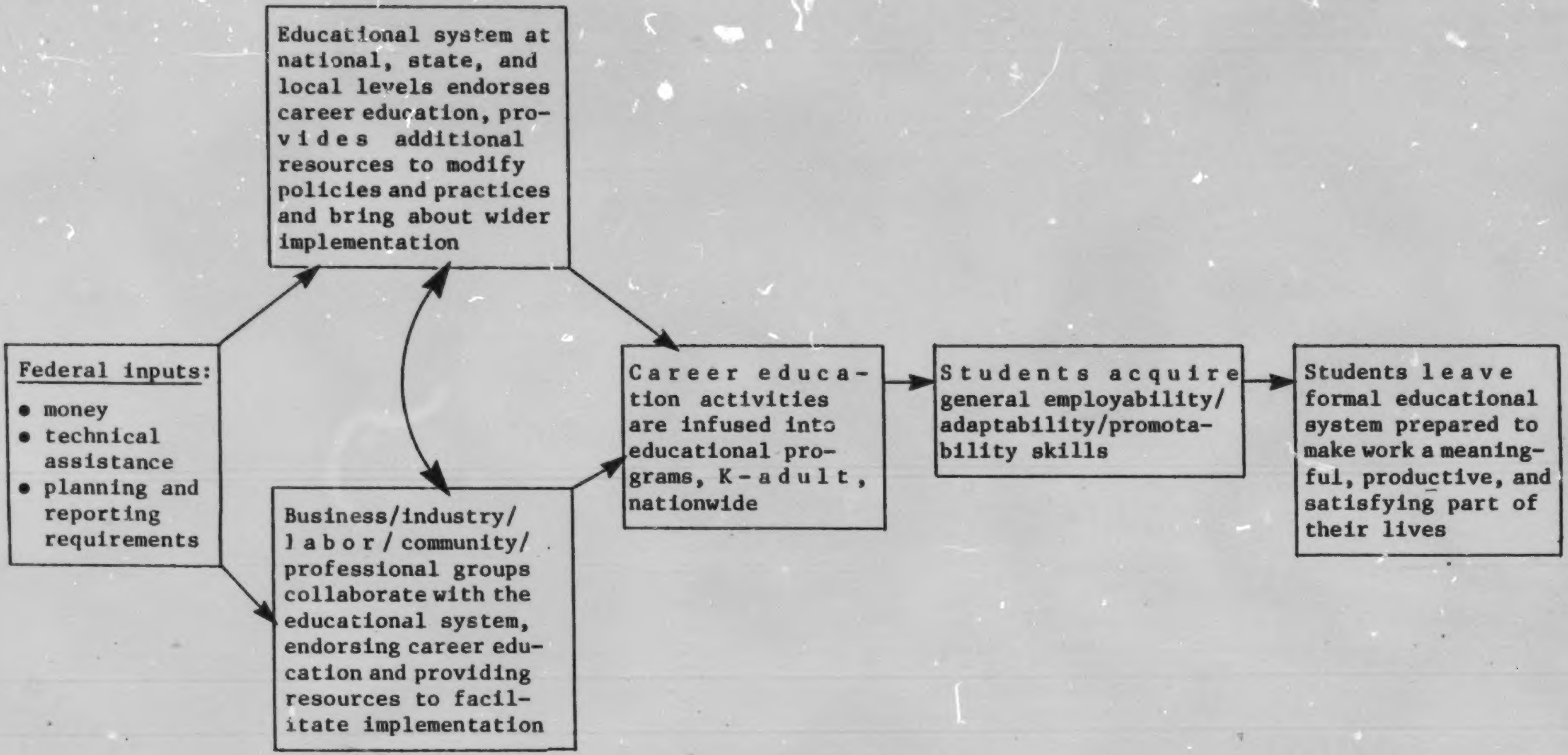
Federal inputs:
• money
• technical assistance
• planning and reporting requirements
Educational system at national, state, and local levels endorses career education, provides additional resources to modify policies and practices and bring about wider implementation
Business/industry/labor/community/professional groups collaborate with the educational system, endorsing career education and providing resources to facilitate implementation
Career education activities are infused into educational programs, K-adult, nationwide
Students acquire general employability/adaptability/promotability skills
Students leave formal educational system prepared to make work a meaningful, productive, and satisfying part of their lives

Figure 1. Simplified PL 95-207 Career Education Incentive Act Program Logic Model

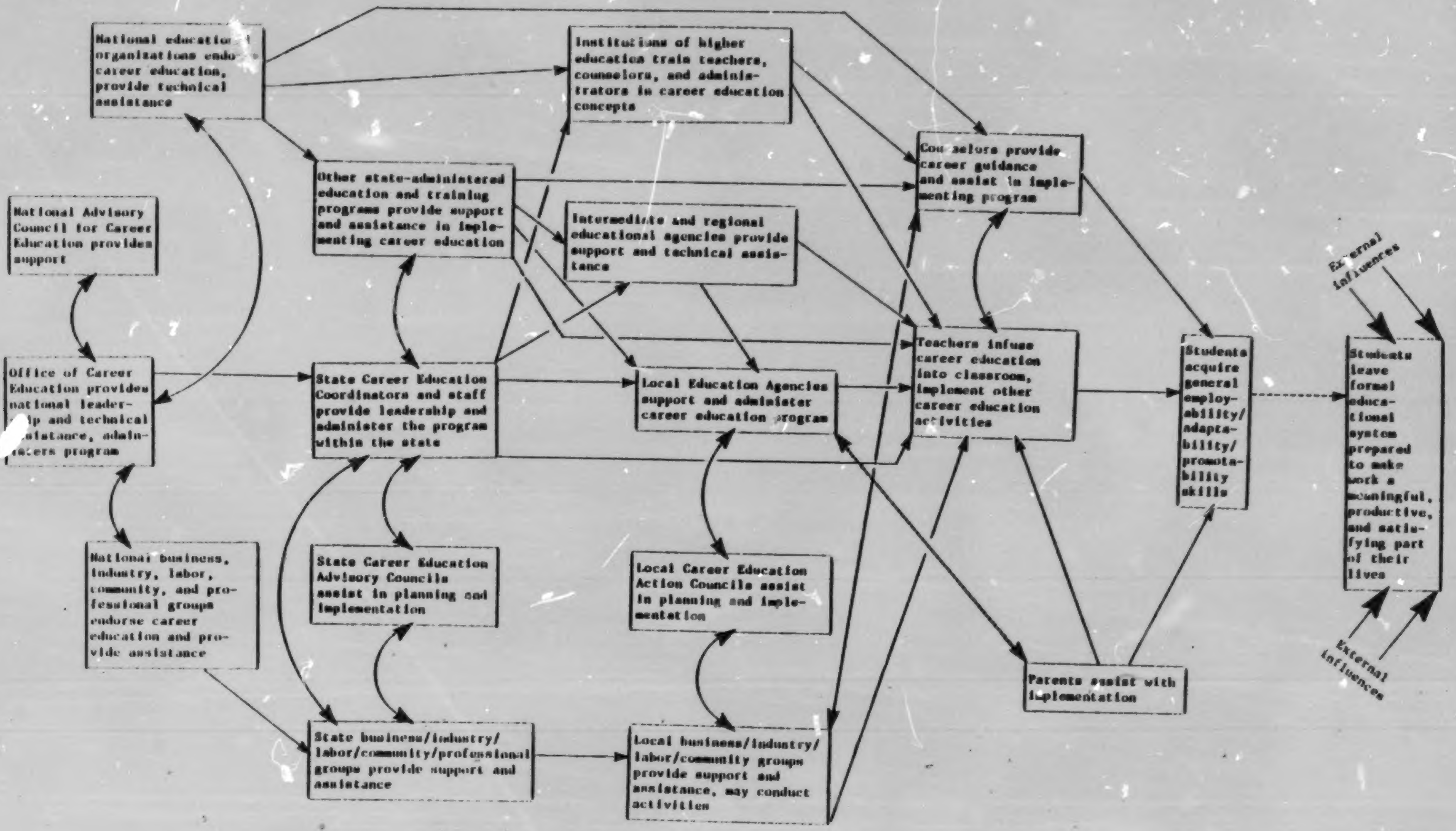
National educational organizations endorse career education, provide technical assistance
Institutions of higher education train teachers, counselors, and administrators in career education concepts
Counselors provide career guidance and assist in implementing program
National Advisory Council for Career Education provides support
Other state-administered education and training programs provide support and assistance in implementing career education
Intermediate and regional educational agencies provide support and technical assistance
Office of Career Education provides national leadership and technical assistance, administers program
State Career Education Coordinators and staff provide leadership and administer the program within the state
Local Education Agencies support and administer career education program
Teachers infuse career education into classroom, implement other career education activities
Students acquire general employability/adaptability/promotability skills
External influences
Students leave formal educational system prepared to make work a meaningful, productive, and satisfying part of their lives
National business, industry, labor, community, and professional groups endorse career education and provide assistance
State Career Education Advisory Councils assist in planning and implementation
Local Career Education Action Councils assist in planning and implementation
Parents assist with implementation
External influences
State business/industry/labor/community/professional groups provide support and assistance
Local business/industry/labor/community groups provide support and assistance, may conduct activities

Figure 2. Main Roles and Relationships in Implementation of PL 95-207 Career Education Incentive Act Program (Detailed Logic Model)

The interviews focused on individuals' views regarding the objectives of the Career Education Incentive Act and the implementation of career education as a result of the Act. The following general topics were covered in each conversation:

- The respondent's view of the intent of the legislation, or the major purpose the Incentive Act was intended to achieve.
- The mechanisms for achieving widespread implementation of career education as a result of the Act--the role of stakeholder groups as well as state and local educational agencies.
- Aspects of the legislation, its regulations, or its administration (at the federal or state level) that could facilitate or inhibit the widespread implementation of career education.
- The prognosis for widespread implementation of career education as a result of the Incentive Act.
- Evidence of successful career education implementation; important issues to be addressed in an assessment of the implementation of career education under the Incentive Act.

Intent of the Career Education Incentive Act. Most of the 40 respondents interviewed believed the Incentive Act was meant to "institutionalize" career education or to "move beyond" the development-demonstration stage of PL 93-380 to full(er) implementation at the local education agency (LEA) level. This view was especially pronounced among the business/industry/labor representatives, the career education specialists, and the state career education coordinators. Educational practitioners, on the other hand, were more inclined to view the Incentive Act as a source of support for developing or demonstrating new career education activities and programs. This narrower view may reflect the greater concern among educational practitioners with school operations at the local level.

Some respondents focused on single aspects of career education implementation, describing the purpose of the legislation as "to infuse career education into the curriculum" or "to increase the involvement of business, labor, and community groups in education." A few of the respondents also cited the attainment of specific learner outcomes (e.g., enhanced career awareness and decision-making skills, improved academic performance) as the major objectives of the Act.

Mechanisms for achieving widespread implementation. State education agency (SEA) representatives reported wide variance in their intended approaches to fostering widespread implementation of career education. Some reported they were targeting their efforts toward a relatively small number of demonstration or pilot school districts, feeling they would achieve maximum impact through concentrating their funds. Others reported they were making a more concerted effort to involve as many LEAs as possible, even at a minimal level; the implicit assumption appear to be that even a small initial involvement may be a sufficient catalyst to encourage teachers and schools to continue on their own.

Most state officials interviewed supported "capability building" as the best means of fostering widespread implementation, either through the development of staff skills (e.g., via inservice training, workshops for state or community staff), or by identification and dissemination of available instructional resources (e.g., through establishing or expanding regional resource centers). Other strategies being pursued included developing commitment (or "ownership") at the local level through planning, conducting needs assessments, and involving community or civic groups. Developing collaborative relationships between career education and other state agency programs (e.g., academic curricula, special education, vocational education) was also cited as an important strategy.

Officials in states that already had a strong career education program were more inclined to view the Incentive Act funds as means of bridging the gap between initial state commitment and complete statewide implementation.

Although all of the non-SEA stakeholder groups had been active in the process of enacting the legislation, they perceived different roles for themselves regarding the implementation of the legislation. Some representatives of business/industry/labor organizations were inclined to assume a major role, as they felt school-work relationships were a central component of career education implementation. Their involvement included assistance in setting up local work-education councils, developing LEA staff awareness of occupations and the world of work, providing job exploration and placement services, recruiting resource people, and developing curricula. In addition, some business/industry/labor organizations had been active in mobilizing support for state career education laws and for funding at the local as well as the state and national levels.

Representatives of community organizations tend to have been very active in terms of advocacy for career education at the local, state, and national levels, helping to form coalitions for career education in local communities, and, especially, identifying and/or providing resources to facilitate career education (e.g., speakers, materials, special programs). These organizations often provided, through their local chapters, nationwide networks for communicating and carrying out the organizations' career education policies; local chapters were reported to be quite active in establishing and supporting cooperative career education efforts in the community.

The national educational practitioners' organizations had received federal support (under PL 93-380) for projects aimed at facilitating career education implementation. The organizations had been involved in assessing the needs and attitudes of their members regarding career education, disseminating information about the career education concept, preparing materials, and providing training for their members.

Facilitators/obstacles to career education implementation. Four aspects of the Incentive Act and its administration were repeatedly mentioned by interviewees as facilitating the implementation of career education. First, the flexibility of the Act, with regard to the range of activities that could be supported, was commended. Respondents felt it allowed states to address the unique needs of various school districts, as well as accommodating differences in needs among the various states. Second, the provision for state leadership in and commitment to career education under the Incentive Act was viewed by several as "legitimizing" career education within the state and as providing for systematic and coordinated efforts, so that maximum value would be received for the funds. Third, the law's provisions for community involvement and linkages to other programs were seen not only as desirable ends in themselves, but also as effective strategies for "institutionalizing" career education within the community and the educational program. Finally, the support and leadership provided by staff of the Office of Career Education (e.g., speeches, mini-conferences, publications, telephone contacts, responsiveness to inquiries) were repeatedly cited as contributing to SEAs' and LEAs' motivation to implement career education as well as to individuals' awareness of how career education could be implemented.

With regard to obstacles to career education implementation, the Congressional rescission and reprogramming of appropriated FY 1979 funds, resulting in funding at only 40% of the level originally authorized, was seen by many as a major barrier. Several respondents observed that the funding levels originally authorized were probably barely sufficient to accomplish the objective of nationwide implementation within five years, but that the amounts appropriated made that goal much more difficult, if not impossible, to attain. Further, the reduced funding levels were seen by some as having implications for other aspects of the legislation--specifically, the five year "sunset" clause and the severe limitations on the proportions of funds that could be spent for state leadership. One respondent observed that the Incentive Act would probably need to be extended another five years to bring about widespread implementation at the current funding levels. Another noted that by the fifth year of the Act, the amount of federal funds available for state administration would not even cover the cost of a part-time secretary.

Other factors mentioned as inhibiting the implementation of the law included the requirement for progressively increasing SEA and LEA assumption of program costs. This was particularly seen as a problem by the state coordinators. Many states had not previously committed funds to career education, and their representatives were skeptical about the likelihood of obtaining such support in the future, given the current demographic/economic climate (e.g., declining school enrollments, Proposition 13, eroding tax bases). Those coordinators whose states had already made substantial state investments were likewise dubious about the chances for increasing those investments. The lack of federal support (i.e., by the current administration) and the concomitant delays in making funds available were also frequently cited as obstacles to implementation. One respondent commented that the states "didn't believe the Feds were serious" about career education, so they didn't organize at the state level to pursue it seriously. Also, many state representatives reported they did not receive their FY79 funds until late in the summer of 1979; it was thus not possible for them to get their programs up and going before the fall semester was well underway.

The exclusion of funding for postsecondary programs was also noted by several practitioners and state coordinators as a barrier to widespread implementation, because it precluded the development of preservice teacher training programs, which many felt were essential for effective implementation. One respondent compared the reliance on inservice staff development to "fixing up the barn after the horse has left."[1]

Feasibility of career education implementation. Fewer than one-third of the respondents felt that the chances for achieving widespread (but not total--i.e., in *every* school) implementation of career education by the time the Incentive Act expired were good. A higher percentage felt that while some progress could be made, nationwide implementation at the K-12 level could not be achieved.

Several respondents noted that widespread implementation was dependent upon other factors outside the control of PL 95-207, such as the states' and LEAs' own motivation and future funding levels, the role of the Office of Career Education within the new Department of Education, and the skills and ability of the people involved in the implementation of career education at local levels. Several respondents felt that career education would be widely implemented and would continue (though perhaps not under that label) in those states with already strong career education efforts, but that it would not continue at any substantial level in states (or, presumably, LEAs) where it was not given a high priority.

Acceptable evidence of success in implementing career education. Nearly half of the respondents (especially educational practitioners and state coordinators) viewed student outcomes as the most important indicators of career education implementation. Included under this heading were students' career-related knowledge and skills, academic performance, attitudes toward school and work, and behavioral measures (e.g., absentee rates, incidence of disruptive behavior), as well as longer-term educational and career outcomes. But the difficulties in obtaining adequate data on student performance gains and in attributing such gains to career education were recognized by many. Suggestions for dealing with this problem included looking only at states or districts which have had ongoing assessment programs and can provide baseline data, looking at districts where career education was obviously being implemented, and, conversely, looking at districts implementing career education for the first time.

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[1] The respondents were mistaken, in that the postsecondary demonstration program was intended to support career education *implementation* efforts at the postsecondary level. Providing support for preservice teacher training remains an allowable state-level leadership option.

An equally large number of respondents recommended looking at the nature and extent of career education "services" and "activities" being offered. Indicators would be derived from analyses of curriculum guides, objectives, and lesson plans, as well as from direct observation of teachers' (and counselors') behavior (e.g., counting references to career-related uses of skills or knowledge). The extent of growth in career education services and activities, at the state and LEA levels, over the five-year span of the Incentive Act, would then be used as an indicator of implementation.

The nature and extent of community involvement was also cited often as an important element of career education implementation. Suggested indicators of community involvement included the extent of utilization of resource people in the classrooms, the availability of internship or other experiential programs for students, the involvement of state and local advisory councils in the planning and implementation of school programs, requests to community groups from schools (or regional or state agencies) for publications or information, and, in general, involvement of the full range of participants as described in Hoyt's 1977 A Primer for Career Education.

The involvement of teachers in workshops, training, and the like was also frequently mentioned as a possible indicator of the extent of career education implementation. Related measures of teacher involvement would include the extent to which other teachers in a school or district who had not participated in the workshops or training become actively involved in implementing career education (i.e., a snowball effect) and the persistence of teachers' career education efforts following the training.

Smaller numbers of respondents recommended looking at the numbers of students reached, the establishment of financial and programmatic linkages to other educational programs (e.g., vocational educaton, CETA, The plans varied widely in general content and organization while reflecting an underlying pattern based on the requirements imposed earlier by PL 93-380. Many plans also reflected the effects of technical assistance provided by staff of the Southwest Regional Laboratory (SWRL) under a previous OCE contract. In reviewing the plans, AIR staff paid particular attention to five areas: previous state involvement in implementing career education; the nature of learner outcomes specified; the types of career education activities planned by the states; stated plans for evaluating efforts and accomplishments; and the states' budgets and mechanisms for use of PL 95-207 funds. A brief summary of our analyses of the plans in each of these areas is presented below.

Previous state-level implementation efforts. A few of the state plans cited career education activities as far back as the mid- to late-60s. Most states, however, appear to have become actively involved in career education in the early 70s, presumably in response to Commissioner Marland's speech to the National Association of Secondary School Principals convention in 1971. Activities cited most often for that period were the development of position or concept papers for career education, the adoption of state resolutions or policy statements endorsing career education, and the creation of SEA-level task forces to plan and coordinate career education activities.

In the mid-1970s, states became actively involved in the development, adoption, and/or implementation of model career education programs and materials. This peak of activity corresponded to the availability of federal funds through Titles III and IVC of the Elementary and Secondary Education Act, Parts C and D of the Vocational Education Act, and NIE's model program development efforts. Over one-third of the plans also reported at least some financial support for career education programs and activities from the state during this period. For example, a number of state legislatures (e.g., Arizona, Connecticut, Iowa, and Louisiana) mandated career education as an integral component of the state's education program. In addition, several states had established advisory panels and/or developed comprehensive state plans prior to the availability of funds from PL 93-380 (e.g., California, Missouri, Maryland, Texas, and Wisconsin). However, a few plans noted that their state's financial support for career education had decreased markedly or disappeared in the mid- to late 70s, due to categorical state school improvement programs, special education), and the extent of LEA financial investment.

Review of FY80 State Career Education Plans

PL 95-207 required each state wishing to apply for FY80 funds to submit a plan to the Commissioner of Education by 1 July 1979. Most states had received grants previously under PL 93-380 to develop comprehensive career education plans. The Incentive Act required these plans to be slightly modified so that they:

> (1) set out explicitly the objectives the State will seek to achieve by the end of each of the fiscal years for which funds are made available under this Act in implementing the goal of providing career education for students in elementary and secondary schools within the State, with special emphasis on overcoming sex bias and stereotyping and set out the methods by which the State will seek each year to achieve such objectives with all resources available;
>
> (2) describe the methods by which the funds received under this Act will be used, in accordance with section 8, to implement the overall objectives in each of the fiscal years for which funds are made available under this Act.
>
> (3) set forth policies and procedures which the State will follow to assure equal access of all students (including the handicapped and members of both sexes) to career education programs carried out under the State plan;
>
> (4) provide adequate assurance that the requirements of section 6 (regarding administration of the state-level program) will be met in each fiscal year after fiscal year 1979; and
>
> (5) provide proposed criteria to the Commissioner for the evaluation of the extent to which the State will achieve the objectives set out in the State plan. (PL 95-207)

Three AIR staff members prepared a detailed analysis of each of the 53 plans received by the Office of Career Education: 49 from states (only New Mexico chose not to participate), the District of Columbia, and three insular areas (Puerto Rico, the Virgin Islands, and Guam). The major intent of the analysis was to describe the activities the states (including insular areas) planned to conduct to implement PL 95-207, along with additional descriptions of plans for combatting sex, race, and handicap bias and stereotyping, evaluating the attainment of state objectives, and mechanisms for distributing PL 95-207 funds to LEAs (and Intermediate Agencies, or IEAs).

financial constraints and, perhaps, a loss of momentum or enthusiasm in the state legislature and/or department of education.

Goals and objectives for students: learner outcomes. Statements that could be translated into outcomes for learners resulting from participation in career education were included in nearly all of the state plans. Most often the statements were phrased as six to ten general goals of career education, which were then detailed by three to five more specific learner objectives.

The measurability of the items included in the outcome lists contributed greatly to our impression of the lists' overall quality. High quality, measurable outcomes contained statements of observable behaviors or well defined knowledges or attitudes. Unfortunately, most of the statements in most of the lists were either too general or too focused on internal psychological processes to lend themselves to assessment. Still, almost all lists included some measurable items. Delaware, Iowa, New York, Ohio, and West Virginia are examples of states whose plans contained a higher-than-average number of measurable career education learner outcomes.

In an effort to see which outcomes received most attention in the state plans, outcome statements were categorized according to an adaptation of USOE's nine major learner outcome goals. (See Table 3 on page 20.)

Each of the 13 separate categories included in Table 3 (three of the ten goals are split into two categories) was represented by some statements, but certain categories received far more emphasis than others. All the state plans that included learner outcomes of some sort included statements related to career decisionmaking skills, self-understanding, and understanding of educational-vocational opportunities (categories 4a, 6a, and 6b). By far the largest number of outcome statements fell into these three categories. Outcomes relating to work values (category 3) were listed by about 80% of the states that listed outcomes, while continuing and recurrent education (category 7) was included in about half of the states' lists. Six other categories ranged in frequency between these percentages: outcome statements in categories 5b, 1, 4b, 5a, 9, and 2 occurred in from 75% to 55% of the plans that included lists of outcomes. On the other hand, less than one-fifth of the states listing learner outcomes included any statements related to placement or changing career options (categories 8 and 10) and no state included more than one statement in either of these two categories in its list.

Table 3. Major Categories of Career Education Learner Outcomes (from Bonnet, 1977)

1	Competent in the *basic academic skills* required for adaptability in our rapidly changing society.
2	Equipped with *good work habits*.
3	Equipped with a personally meaningful set of *work values* that foster in them a desire to work.
4a	Equipped with career *decision-making skills,* job-hunting skills, and job-getting skills.
4b	Equipped with career decision-making skills, *job-hunting skills, and job-getting skills*.
5a	Equipped with *job-specific occupational skills* and interpersonal skills at a level that will allow them to gain entry into and attain a degree of success in the occupational society.
5b	Equipped with job-specific occupational skills and *interpersonal skills* at a level that will allow them to gain entry into and attain a degree of success in the occupational society.
6a	Equipped with a degree of *self-understanding* and understanding of educational-vocational opportunities sufficient for making sound career decisions.
6b	Equipped with a degree of self-understanding and *understanding of educational-vocational opportunities* sufficient for making sound career decisions.
7	Aware of means available to them for *continuing and recurrent education*.
8	Either placed or actively seeking *placement* in a paid occupation, in further education, or in a vocation consistent with their current career decisions.
9	Actively seeking to find meaning and meaningfulness through work in productive use of *leisure time*.
10	Aware of means available to themselves for *changing career options* --of societal and personal constraints impinging on career alternatives.
11	Other

The review of state plans also addressed the issue of whether the states linked their lists of learner outcomes to the activities they planned to conduct with PL 95-207 funds. *Only about one-fifth of the states attempted to formulate such a linkage*, and in nearly all of these cases the relationships were specified only at the most general level.

Planned career education activities (state-level). The Career Education Incentive Act and its regulations specify a number of allowable state-level administrative and leadership activities aimed at facilitating local-level efforts. *Administrative activities* include employing additional state personnel to manage the program and reviewing and revising the state plan. *Leadership activities* include: conducting inservice institutes for educational personnel; training local career education coordinators; collecting, evaluating, and disseminating materials; conducting statewide needs assessment and evaluation studies; conducting statewide leadership conferences; promoting collaborative relationships with business, industry, labor, and other community groups; and assisting institutions of higher education to incorporate the concept of career education into their teacher training curricula.

All of the state plans included some, and usually extensive, discussion of activities that would be carried out at the state level. In many cases the plans were very specific about what would be done. In others, however, the "activities" were expressed as general state-level objectives (e.g., "to bolster program planning capability at the local level"), and it was not always clear what would be *done* to attain those objectives. Typically, activities/objectives were organized *not* in terms of particular learner outcomes to be attained but rather in terms of an overall career education implementation plan, paralleling closely the state administration and leadership activities specified in PL 95-207 (although the specific language was not necessarily used). For each goal, activities/objectives were specified, often including indications of who would carry out or participate in the activity, the resources that would be required, appropriate evaluation indices or strategies, and a timeline indicating when the activity would occur. It was often impossible to tell, however, whether a particular activity was to be supported from PL 95-207 funds or other sources.

Certain types of state-level activities predominated, both in terms of the number of states planning those activities and the overall proportion of effort to be devoted to those areas. Activities apparently given highest priority included: conducting inservice training for educational personnel; collecting, evaluating and disseminating career education materials; and engaging in collaborative relationships. Little attention was given to conducting statewide career education leadership conferences and to training local career education coordinators. Table 4 contains a summary of the types and percentages of state-level activities planned by each state. Detailed text explaining Table 4 is provided in Appendix B.

One other area requires special comment: activities aimed at overcoming bias and stereotyping. Several states planned to deal with this area explicitly, primarily through inservice training or through the development, evaluation, and dissemination of materials. Many states, however, simply asserted that attention would be given to strategies and procedures for overcoming bias and stereotyping without specifying what would be done, by whom, or when.

The scope of activities planned by the states is initially quite impressive. However, several qualifications must be noted. First, several states developed their plans on the explicit assumption that Congress would appropriate the full amount of funds authorized in the legislation (i.e., $50 million in FY79, $100 million in FY80, and so on), rather than the $20 million that was eventually appropriated ($18.7 million of which were awarded to the states). It was not clear how the states' plans would have to be modified as a result--whether activities will be carried out on a smaller scale, or whether some will be omitted altogether.

A second point worth noting is that in most cases we could not determine the numbers of individuals to be involved in a given activity. For example, we could not tell whether a planned workshop for LEA personnel would include five or 500 individuals. Since few states attempted to provide cost estimates for specific activities, it was not clear whether or not the planned activities are in fact feasible, given the resources available.

Evaluation of state and local-level career education efforts. All of the state plans included at least some mention of plans and procedures for evaluating state-level career education activities. Most also required funded IEAs and LEAs to provide some form of evaluation of their efforts. A few plans stated that evaluation was exclusively an LEA concern (though the state would provide technical assistance).

Most of the states focused on process evaluation, where the concern was to determine whether the funded activities were being implemented as intended. Thus, for each objective or activity, the plan would specify an appropriate evaluation indicator (e.g, "the number of teachers inserviced") or a strategy (e.g., "examine minutes of Advisory Council meeting"). Most of the proposed indicators and strategies involved use of existing documents. In some instances, however, interviews, surveys, and observations were planned. Replications of state and local needs assessments were sometimes mentioned. In a few cases (e.g., Michigan, Vermont), the indicators included (or implied) qualitative as well as quantitative concerns (e.g, extent to which each local plan contained needs, goals, and a timeline of activities). For the most part, however, the proposed evaluation measures involved relatively simple counting exercises.

Several states (e.g., Florida, Arizona, Michigan, Texas, and Ohio) also proposed to assess career education student outcomes by measuring increases in career-related knowledge and skills. These states planned systematic, often statewide, assessment efforts aimed at documenting knowledge and skill gains as career education became more widely implemented. A few states (primarily those with historically strong career education programs, such as Arizona) also planned follow-ups of students after they left high school to assess longer-term career outcomes that were presumed to result from career education experiences. However, in no case was there provision for attributing observed outcome gains to particular career education activities, or even necessarily to the implementation of career education itself.

Some states (e.g., California, Wisconsin, Oregon) had already prepared local project evaluation guidelines and were able to include them in their state plans. Most, however, planned to develop evaluation materials and guidelines as part of their state leadership responsibility.

While a few of the states presented coordinated and reasonably comprehensive plans for evaluating both state- and local-level efforts and accomplishments, many appeared to have addressed the issue in a rather perfunctory way. We got the impression such states will collect and provide as much data on the nature and extent of funded efforts as they are required to do by OCE, but we do not sense that they plan to make any further use of the data.

State budgets and planned use of PL 95-207 funds. Budgets were included in over three-fourths of the state plans. However, the budgets varied widely in terms of their scope and comprehensiveness. Nearly all of the budgets projected expenses for the full five years covered by the plans; of the remainder, a few states included cost breakdowns only for the first year (FY79) while others dealt only with the remaining four years (FY80-83). As noted previously, several states' budgets were based on the authorized (rather than appropriated) federal funding levels, with the stipulation that the budgets would be revised once actual allocations were received. Similarly, some states indicated that they would submit budgets, or extend their budgets over FY80-83, in subsequent revisions of their plans after funds had been allocated.

Over half of the states providing budgets included estimates of the implementation costs to be covered by the state as well as those to be supported with Incentive Act monies. The budgets were often not clear, however, as to the sources of these state funds. Very few states specified the extent of expected support from local funds or in-kind contributions. A few budgets (e.g., those of Connecticut and Montana) stood out because of their specificity in identifying sources of funds. Rather than using the general categories of "federal," "state," and "local" in identifying sources of funds, the specific programs or agencies from which funds are to be obtained were noted (e.g., CETA, Title IVC, Vocational Education Act, Teacher Corps, state staff development, local business and labor groups). Those states would appear not only to have carefully thought through their funding needs but also to have thoroughly investigated possible sources of support for the implementation of career education.

Approximately half of the states appeared to plan some form of state financing for career education in FY79. Not surprisingly, most of these were states that had supported career education efforts in the past. The magnitude of the anticipated state FY79 investments ranged from a few thousand to over three million dollars, with the majority being under one hundred thousand dollars for the year.

IEA/LEA funding mechanisms. Procedures to be used in allocating funds to IEAs and/or LEAs were discussed in approximately two-thirds of the state plans. In some cases (e.g., Montana, Nebraska) the states planned to utilize disbursement procedures that were already in place, while other states developed procedures specifically for the PL 95-207 monies. Several of the states, however, noted that disbursement procedures and guidelines would be developed as part of the state-level administration of PL 95-207.

The extent of the discussions of disbursement mechanisms included in the plans varied widely. Some states provided only a brief, pro forma reference to the fact that LEAs and/or IEAs would be submitting proposals, which would be reviewed by the State Coordinator's office. Others provided more detailed and specific descriptions of their mechanisms, covering some or all of the following: the designated recipients, the kinds of activities to be supported, the review process, and special criteria to be utilized in reviewing the proposals. A few even appended to their plans copies of the RFPs and guidelines that would be issued.

Some rather pronounced differences in funding mechanisms were apparent. A few states (e.g., New York, Georgia, Florida, Michigan) planned to allocate funds only to a select group of IEAs or LEAs, typically those with some prior background in career education or a well-developed local career education plan. Presumably those LEAs or IEAs were expected to get the most mileage out of the limited funds available. Some other states (e.g., Connecticut, Vermont) planned to allocate funds only to IEAs and/or consortia of LEAs. Many states, on the other hand, intended to make funds directly available to all LEAs and, perhaps, IEAs as well. Some, however, required LEAs to submit, and have approved, preliminary applications prior to submitting formal proposals.

Most states planned to make funds available through grants, primarily for planning or adoption/implementation. Some states planned to award minigrants to schools to provide local-level incentives analogous to the federal incentive program for the states. A few states also planned to fund training, dissemination, guidance activities, materials development, or the establishment of resource centers. In a few cases (e.g., California, New Hampshire, Wisconsin, New York) the states planned to issue contracts to IEAs, LEAs, or other institutions to carry out these activities on a statewide basis, making them similar in purpose to "state leadership" activities rather than local implementation activities.

With regard to the review of proposals, many of the states planned to utilize their State Advisory Panels and/or outside consultants in addition to reviewers drawn from the State Education Department. In a few instances, the Advisory Panels were also actively involved in developing the RFPs, guidelines for application, and review criteria. Only one state cited the relationship between planned activities and learner outcomes as a basis for making funding decisions.

Summary Impressions of State Plans

As the above discussion reveals, there was considerable variability among the state implementation plans: some were excellent, some were rather poor, and most were in-between. The following characteristics seemed to be associated with the better-than-average plans:

- a clear, succinct, and logically organized narrative;
- having a well-developed conceptual base with carefully delineated linkages between statements of learner outcomes, classroom and LEA activities, and state-level activities;
- documentation of planned activities for collaboration within the SEA and with employer, higher education, and community groups; and
- attention to details of how PL 95-207 funds and funds from other sources would be disbursed and spent.

Few, if any, plans were consistently strong in all areas. In some cases the utility of the plans as a working guide for their states' subsequent efforts seemed doubtful, due to lack of specificity about exactly what would be done, by whom, and to whom, or due to a lack of integration of the different components of the plan. This may be attributable in part to the plans having been developed initially for PL 93-380, with somewhat different requirements from those of PL 95-207. In other instances the plans were clearly the result of careful and extensive deliberation, and reflected the input of the various education, business, community, and other groups essential for implementing a comprehensive career education program. This effort was generally reflected in the clarity and quality of the plan.

Taken together, the plans do provide a general picture of how the states intend to implement career education under the Career Education Incentive Act. In considering the evaluability of the career education program as reflected in these plans, however, several issues emerge. First, as noted previously, the intended learner outcomes are typically not stated in measurable terms. Intermediate stages leading to those outcomes that career education activities implemented under this Act can reasonably be expected to produce must be derived. Second, the relationships between the planned state-level activities/objectives, local-level or classroom activities, and the desired learner outcomes are not well drawn in most cases. These expected relationships need to be clarified. Third, while many state-level activities/objectives are described in measurable terms (e.g., "___ will occur," or "___% of teachers will participate"), the indices or strategies suggested for evaluating them do not get at the quality of the efforts undertaken. Such qualitative criteria or standards for evaluating the activities being implemented must also be derived before the program's measurement model can be formulated.

Finally, it must be remembered that these are only plans, and that what actually occurs in the various states and LEAs may be somewhat different, as a result of experience gained, changes in funding levels, changes in personnel, emerging needs, and other unexpected events. In determining the evaluability of the career education program being implemented under the Career Education Incentive Act, then, one must look at what is actually done in the various states and territories.

Site Visits to Ten States

The final effort undertaken by AIR staff during the study's initial descriptive phase was to conduct personal visits to ten states, one in each of the ten DHEW (now ED) regions. The visits concentrated on: the actual mechanisms being utilized by each state to fund LEA/IEA projects; the actual state leadership and local-level activities being carried out with the FY79 funds, which were received by most states during June and July of 1979 (see Appendix C for a list of the total amounts of FY79 money allocated by state); and state leaders' perceptions of potential state administrative problems with certain portions of the Act (i.e., the "matching" and "maintenance of effort" provisions).

States originally selected for site visits were as follows:

Region	State	Region	State
I	Vermont	VI	Texas
II	New York	VII	Missouri
III	Maryland	VIII	Colorado
IV	Florida	IX	Arizona
V	Michigan	X	Idaho

Selections were based on preliminary reviews of the states' FY80 implementation plans, which showed these states had planned a wide variety of activities authorized by PL 95-207.

Chief State School Officers in each state were contacted on 5 December 1979 by the Director of the Office of Evaluation and Dissemination requesting their participation. Only the Missouri SEA declined to allow site visits to be scheduled, and site visits to California were substituted. All visits were conducted by one or two trained and experienced AIR staff members. Persons interviewed included the State Career Education Coordinator, other SEA staff members involved in the administration or delivery of state-level services under PL 95-207, and a selection of regional- and local-level personnel.

Mechanisms for state distribution of PL 95-207 funds. The mechanisms for distribution of PL 95-207 funds from the SEA to IEAs and LEAs differed in every state visited. These differences were largely attributable to differences in: the degree of past state-funded implementation of career education; the SEA's philosophy of involvement with local districts; and the amount of PL 95-207 funds received (states receiving both maximum and minimum amounts of money were visited).

In all ten states, LEAs or IEAs were required to submit some form of proposal or application to receive funds, but the degree of competition involved ranged from virtually none to considerable. In general, the states that received small amounts of federal money (e.g., Arizona, Vermont) chose to target the funds very specifically on a few needy regions or districts, rather than to encourage widespread participation; this was not the case in Idaho, where its minimum ($125,000) grant was used to support a $300 minigrant competition that reached every school building in the state. States that received the largest amounts (e.g.,

Preliminary Analysis of the PL 95-207 Program: Functional Program Models

The findings summarized in the previous chapter provide a wealth of descriptive information about the Incentive Act program--as it is intended and as it is actually operating. Because the intents of the program as stated in PL 95-207 are vague and flexible, there is little basis for inferring discrepancies between the mandated and the intended program as seen by OCE managers. But there are several points at which the intended program appears to be discrepant from the actual program. These points will be described in the following narrative, which is organized around two types of functional program model: (1) that for the flow of PL 95-207 funds and the accountability for those funds and (2) that for the programmatic interventions supported directly or indirectly by PL 95-207.

Program Accountability and Flow of Funds

The most prescriptive aspects of the PL 95-207 concern the administrative requirements for submitting plans, distributing funds, and preparing reports over its intended five-year lifespan. As intended by the Act and OCE program managers, this "Flow of Funds" model is displayed in Figure 3, with separate levels for the Congress, OCE, the states, and local agencies. In general, the discrepancies between the "intended", as represented by this model, and the "actual," as documented during our site visits, constitute: (1) delays in federal allocation of FY79 funds; (2) delays in OCE reviews and required state revisions of plans; and (3) confusion regarding the timing of evaluation reports required by the law for FY79.

Although the law envisioned (and most states planned) that their FY79 PL 95-207 funds would be available for expenditure late in calendar year 1978 (fiscal year 1979 began 1 October 1978) or early in 1979, delays in the appropriation process (and a $12.5 million Congressional rescission) rendered OCE unable to disburse the funds until June of 1979. This was as much as a year after the states had submitted their original assurances to qualify for the funds and after most states had submitted their FY80 plans. Fortunately, the "Tydings Amendment" (Section 412(b) of the General Education Provisions Act) allows FY79 funds to be spent during FY80; so states now have until the end of September 1980 to expend their FY79 allocations.

competition until the fall and awarding grants early in 1980 for expenditure during the spring and summer!

Another common area of expressed concern was the PL 95-207 "maintenance of effort" requirement, which precludes any state that receives PL 95-207 funds from spending less for career education than it spent in the immediately preceding year. While states with no specific "career education" program were presumably not affected, those that had enacted and funded such programs, especially with decreasing authorizations, viewed the requirement with some alarm.

Other requirements of the law that we expected to produce some consternation did not do so. SEA officials generally took a position of benign neglect toward the Act's evaluation requirements, feeling they were so non-specific as to be satisfiable with almost any kind of report. One state coordinator who was not planning to collect any local data at all said, "Oh, we'll give them whatever kind of report they ask for!" On the other hand, several coordinators expressed great concern that Congress, which they felt needs to be informed of the uses of the PL 95-207 money, would get no enlightenment from the mandated evaluation reports. They had resolved to try to prepare a more useful reporting system, to be administered on a volunteer basis by the State Coordinators.

An almost cavalier position was taken toward the law's requirement for participation by private schools. Most coordinators reported that private schools were, of course, welcomed, but "none had asked for services."

The Act's provision for an increasing nonfederal share of the cost of participation also caused little concern. SEA personnel felt that there were sufficient "unlabelled" state and local expenditures that could be designated as "career education" costs to meet these "matching" requirements with ease, as long as the overall level of federal funding remained stable.

many strings attached; State Coordinators feel PL 95-207 is written so as to give states great flexibility in determining how their money should be spent. We encountered no state agency staff member who reported that desired activities could not be carried out because of restrictions in the law or its regulations.

The most widely acknowledged problem with the PL 95-207 program is, of course, the lack of sufficient funds. Most of the state personnel interviewed, especially in those states receiving minimum grants, felt it was unrealistic to expect much impact from the small amounts of federal funds available. We were told repeatedly of the disillusionment and discouragement that stemmed from the recision of $12.5 million in FY79 funds. Most respondents recognized the improbability of receiving "full funding" from the Congressional appropriations committees. But when $32.5 million were appropriated in FY79, and preliminary state allotments, albeit meager, were announced by USOE, many state personnel began to act in anticipation of receiving those funds. The Congressional rescission, including funds for the entire postsecondary program, was unexpected and, in fact, was viewed as a breach of promise by some.

A related problem was the late arrival of the $18.7 million in FY79 funds that were allocated. Having been expected in late 1978, the funds actually arrived during the summer of 1979. Several state officials who had prepared grant announcements and had primed their constituents for the program were embarrassed by the interminable delay. In Texas, for example, a proposal writing workshop had been held by one IEA for 15 districts, plans had been written, school boards had been alerted, staffs were primed. When April 1979 passed with no funds being released, the entire operation was aborted. "Career education" became something of a joke in the region. None of the 15 districts subsequently submitted proposals when funds finally did become available in June.

Probably the largest problem caused by the delay in FY79 funding was the fact that it forced most states to conduct their grant competitions during the summer of 1979. Proposals had to be written and signed off by local boards during a time when most school personnel were on vacation. Inservice workshops could not be planned and conducted prior to the fall school openings. Staff could not be hired until classes were well underway. New York addressed this problem by delaying its entire FY79 grant

Appendix D contains detailed descriptions of some of the more notable PL 95-207 state-level leadership activities we visited.

Retention of state-reserved funds. PL 95-207 allowed SEAs to retain up to 10% of their FY79 funds for employing state administrative personnel (only 5% in subsequent years). Some states (e.g., Arizona, Idaho) retained no administration funds, using state-funded personnel to carry out the functions of grant monitoring and state plan revision. Other states (e.g., Texas, California) retained somewhat less than 10%, but the majority of the ten states visited withheld the full 10% authorized (one even stretched this limit).

Acting on the principle of devoting as much of their PL 95-207 funds as possible to local-level activities, California and Michigan retained no PL 95-207 funds for state leadership, and several other states (e.g., Texas, Arizona, Idaho) retained less than the 10% allowed by PL 95-207. These tended to be the states where extensive career education programs had been in place well before the passage of PL 95-207 and where state leadership was viewed as less essential. But even these states devoted some of their administrative money (i.e., state staff time) or LEA funds to "state leadership" types of activities, as noted above.

Strengths and limitations of PL 95-207. From the perspective of the state career education personnel we interviewed, the PL 95-207 program has both strengths and limitations as an aid to the full implementation of career education in America.

In most states, the Act is viewed as a much needed stimulus at a time when state and local funding is beginning to decline. The comprehensive state planning requirement, which might have been onerous, was generally viewed as beneficial due to the fact that PL 93-380 funds and OCE (SWRL) technical assistance had been made available to ease the process and FY79 funds had been disbursed through submission of simplified "assurances."[1]

Viewed as an added benefit, especially in states such as Texas and New York, is the freedom from extensive reporting and accountability requirements. Much federal assistance is accepted reluctantly because of the states. But collaboration also contributes to the difficulty of determining exactly what activities are funded by PL 95-207.

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[1] It should be noted that our site visits were conducted before OCE had completed its "compliance reviews" of the FY80 plans. Delays with these reviews have subsequently delayed allocation of the FY80 PL 95-207 funds (see p. 37).

Moreover, Regional Education Service Centers (ESCs), Boards of Cooperative Educational Services (BOCES), or other intermediate education agencies are often involved in assisting with the delivery of PL 95-207 funded services. These IEAs are often funded from multiple state and federal sources. Regional consortia received the bulk of funding in Texas, through the ESC network, and county-level agencies received most of the funds in Maryland, Florida, and Vermont. BOCES in Colorado and New York and a county agency in California received major grants for carrying out resource dissemination efforts throughout the state (in effect, these were "state leadership" activities, but only New York's was so labelled).

Conduct of state leadership activities. The SEA site visits revealed considerable congruence between the state leadership activities included in the FY80 state plans and those actually underway in the ten states. As indicated in the earlier discussion of the planned activities, most states placed local "capability building" as their top leadership priority. All ten states were using some portion of their state funds (either administration or leadership) to conduct or contract for some form of collaborative activity, with other departments of the SEA, and/or with other public or private agencies and organizations representing business, industry, labor, and community interests in the state. Most states visited were also conducting some form of state leadership conference and supporting the inservice training of educational personnel. In these activities, top priority was given to teaching the major tenets of career education: how to infuse career education concepts into the elementary and secondary curriculum; how to generate local-level collaboration in support of the career education program; and how to implement comprehensive programs of career guidance, counseling, placement, and follow-through. About two-thirds of the states were devoting some PL 95-207 resources to collecting, evaluating, and disseminating career education resources (although as noted, several were not calling this "state leadership") and conducting statewide needs assessments and evaluations. In contrast to the intents expressed in many of the state plans, only one state (Arizona) was using its PL 95-207 funds to encourage the development of preservice career education programs in higher education institutions.

The state PL 95-207 fund distribution mechanisms generally stressed prior written administrative commitment to career education implementation as a prerequisite for all local-level applicants. But states were somewhat divided on the degree to which *need* was stressed as a primary funding criterion. Some mechanisms functioned to give top priority to local agencies that had made the most progress previously in implementing career education--those with past experience and demonstrated staff *capability* to write a good proposal, plan a high quality project, and engage considerable local participation and resources. In one state (New York), the majority of funded projects were viewed frankly as demonstration efforts: centers of excellence to be modeled by surrounding agencies. In Michigan, agencies that had not advanced toward local implementation were declared ineligible for PL 95-207 grants. In Colorado, only agencies or individuals that had participated in previous state training programs could apply for local-level grants.

Other mechanisms functioned to give top priority to the most needy agencies--those that had *not* made much progress in implementing career education previously. For example, Arizona solicited applications only from agencies that had been previously underserved by the state's large career education program.

In general, however, most state mechanisms stressed both need *and* demonstrated agency capability, requiring all applicants to show some deficit in attainment of desired career education learner outcomes and then selecting those applicants that showed the most promise of conducting a successful project.

Most state funding mechanisms also required all grantees to show some evidence of local-level *collaboration* in their applications or projects. Involvement of local business, industry, labor, professional, and community groups as advisors and/or participants appears to be a hallmark of the career education efforts being implemented through PL 95-207.

Another hallmark is the common use of PL 95-207 funds in conjunction with funds from other *federal* programs, especially vocational education, educational personnel development, ESEA Titles IVB and IVC, and CETA. Most local-level projects feature elements or components partially supported by these sources, and this collaboration is encouraged by most

Table 5

Overview of State LEA/IEA Funding Mechanisms

State	Total Funds Received	Priority Area(s)	N of Eligible Agencies	N of Applications	N of Applications Funded (%)	Minimum/ Maximum Grants	Availability of State Career Education Funding (FY79)
Arizona	$189,000	local coordinators	5	5	5 (100%)	$30,000/$30,000	$3.6 million
California	$1,682,000	all areas (included planning grants and a minigrant competition)	c1,200 (plus c7,500 for minigrants)	618 (185 minigrants)	156 (25%) (47 minigrants)	regular grants $3,000/$150,000 (minigrants $700/$5,000)	none
Colorado	$210,000	business-education councils guidance minigrants	34 50	27 30	27 (100%) 30 (100%)	$1,500/$1,500 $200/$200	unknown
Florida	$599,000	inservice, promoting community involvement	67	48	48 (100%)	$5,000/$17,500	unknown, but significant
Idaho	$125,000	all areas (included a minigrant competition)	115 (unknown for minigrants)	27 (47 minigrants)	16 (60%) (33 minigrants)	$1,000/$16,000 (minigrants $200 /$300)	c$50,000
Maryland	$340,000	all areas (included planning grants)	25	13	12 (92%)	$5,500/$50,000 (planning grant $3,000/$3,000)	unknown, but significant
Michigan	$777,000	all areas (included planning grants)	45 counties 454 LEAs	45 counties 454 LEAs	45 counties (100%) 454 LEAs (100%) (141 planning grants) (313 implementation grants)	Counties $1,200/$5,000 (LEA planning grants $500/$500) (LEA implementation grants $1,000/ $45,000)	$570,000 (staff development) plus unknown, but significant
New York	$1,389,000	all areas (included planning grants)	44 BOCES 737 LEAs	100 (31 planning grants)	29 (29%) (11 planning grants)	$unknown/$50,000 (planning grants $unknown/$10,000)	none
Texas	$1,058,000	all areas	20 Education Service Centers (ESCs) 1,100 LEAs	16 ESCs 300 LEAs	16 ESCs (100%) 200 LEAs (67%)	$3,000/$55,000	none
Vermont	$125,000	local and regional coordinators, supplies/materials	25	25	10 (40%)	$4,400/$5,000 (plus 2 regional coordinators @ $25,000)	c$50,000

California, New York, Texas) were more likely to concentrate their funding in larger grant competitions featuring requests for proposals (RFPs), detailed proposal rating criteria, and considerable local participation. States receiving intermediate size PL 95-207 grants (e.g., Michigan, Florida, Colorado) tended to conduct limited competitions, giving top priority to districts and regional agencies that had already developed workable implementation plans or had participated in previous state-sponsored capability-building activities. In these states, applications were only solicited from such agencies.

In California, Michigan, Maryland, and New York, districts could choose to compete for different categories of grants ranging from smaller planning grants for those not yet ready to begin wide scale implementation to larger implementation grants in such areas as: teacher inservice training; materials development, acquisition, and dissemination; implementing comprehensive career guidance programs; and stimulating business and community involvement in career education.

Table 5 on the next page provides a brief overview of the outcomes of the fund distribution process in each of the ten states visited. The ranges in grant sizes and the variations in percentages of applications funded provide the best indication of the degree to which a state encouraged or limited competition. The table also illustrates the extreme difficulty of estimating the amounts of state funding devoted to career education. Every state visited had varying degrees of previous career education activity prior to passage of PL 95-207. But sources of funding varied greatly. In a few states (e.g., Arizona, Michigan, Florida), state career education laws that provided specific funds for planning and implementation of career education had been passed as early as 1972. Other states had not provided funds for "career education" specifically, but had funded closely related topics: career guidance, vocational education, school improvement, staff development, and so forth. In addition, all states fully or partially paid the salaries of the State Coordinator and his or her staff, which in some cases ran to as many as four to five full-time professionals and their administrative support. These individuals were all engaged in career education-related work, but work that often was not labeled "career education" per se.

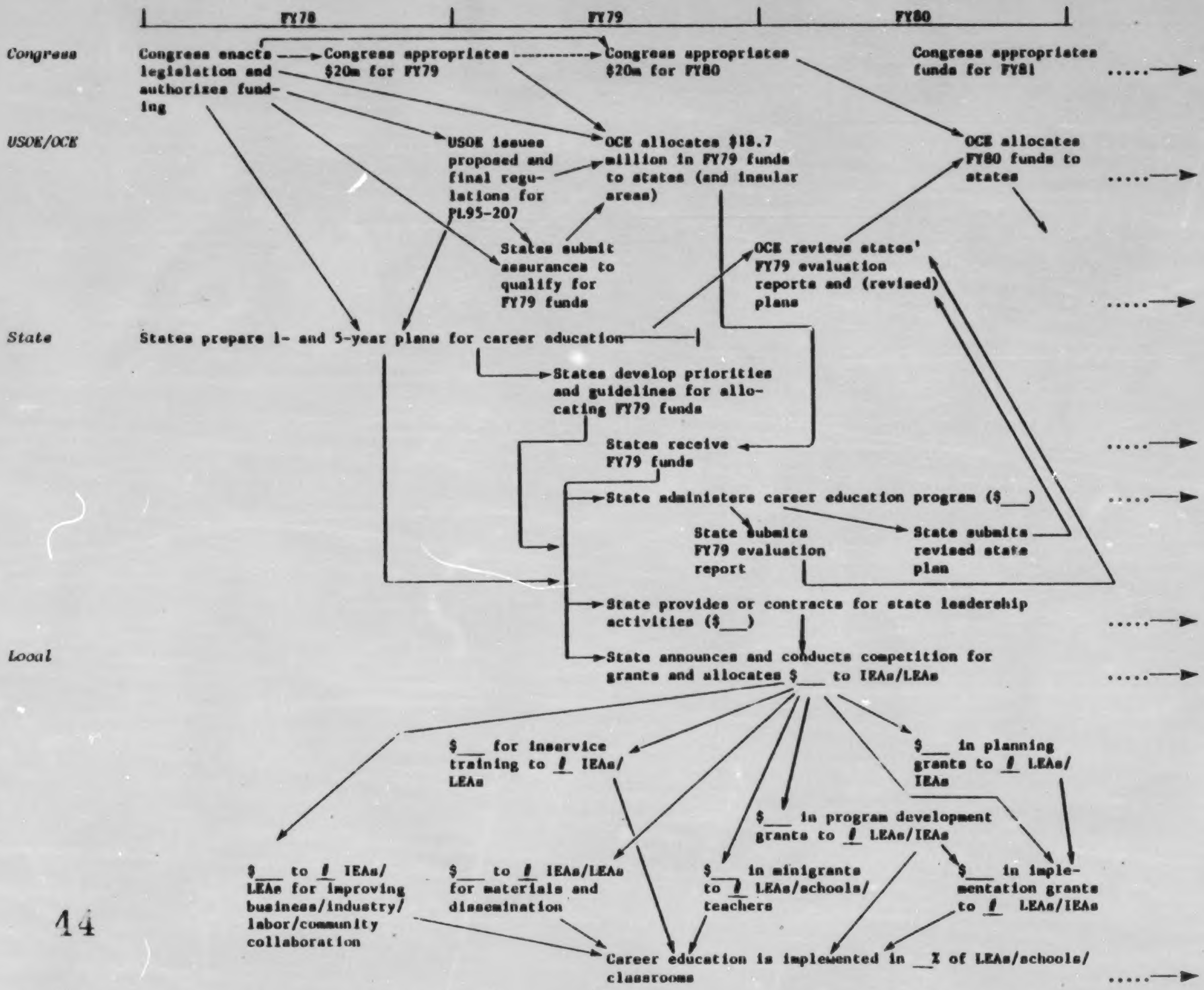

FY78
FY79
FY80
Congress
USOE/OCE
State
Local
Congress enacts legislation and authorizes funding
Congress appropriates $20m for FY79
Congress appropriates $20m for FY80
Congress appropriates funds for FY81
USOE issues proposed and final regulations for PL95-207
OCE allocates $18.7 million in FY79 funds to states (and insular areas)
OCE allocates FY80 funds to states
States submit assurances to qualify for FY79 funds
OCE reviews states' FY79 evaluation reports and (revised) plans
States prepare 1- and 5-year plans for career education
States develop priorities and guidelines for allocating FY79 funds
States receive FY79 funds
State administers career education program ($___)
State submits FY79 evaluation report
State submits revised state plan
State provides or contracts for state leadership activities ($___)
State announces and conducts competition for grants and allocates $___ to IEAs/LEAs
$___ for inservice training to # IEAs/LEAs
$___ in planning grants to # LEAs/IEAs
$___ in program development grants to # LEAs/IEAs
$___ to # IEAs/LEAs for improving business/industry/labor/community collaboration
$___ to # IEAs/LEAs for materials and dissemination
$___ in minigrants to # LEAs/schools/teachers
$___ in implementation grants to # LEAs/IEAs
Career education is implemented in __% of LEAs/schools/classrooms

Figure 3. Preliminary Flow of Funds Model for PL95-207

But one effect of these delays has been to displace the initial implementation time schedule by approximately a year.

Because of inability to obtain necessary staff, OCE had not yet completed its review of the FY80 state plans as this report was being prepared. Submitted before 1 July 1979, these plans must be reviewed and formally accepted before FY80 funds can be allocated. As a result, it appears that the FY80 funds also will be delayed, perhaps by as much as nine months (an entire school term). The cumulative effects of those FY79 and FY80 funding delays on actual state and local implementation is hard to assess. Clearly, our previous analysis shows there have been deleterious consequences. Potential benefits depend on the degree to which the quality of the state plans is improved as a result of OCE's review, once it can be completed. Our general impression was that most states view these plans as compliance documents rather than implementation tools; therefore, the potential for improvement would appear to be somewhat limited.

A final related problem is the requirement that states report to OCE on the results of their implementation efforts at the end of the Act's first full year of operation. Most state officials we interviewed took the position (reasonably, in our opinion) that School Year 1979-80 was the first full year of operation, even though funds were technically received during FY79 (which ended 30 September 1979). They therefore assumed that the first mandated reports would be due on 31 December of 1980. This also would represent a one year delay in comparison with the Figure 3 model. Recently OCE has informed the states that FY79 is considered as the first year of operation and that FY79 reports were due on 31 December 1979. While technically correct, this decision is unlikely to be welcomed by most state officials; only a handful of reports had been submitted as of this writing. OCE's reaction to this situation could further effect the program's implementation prospects.

Direct and Indirect Program Interventions

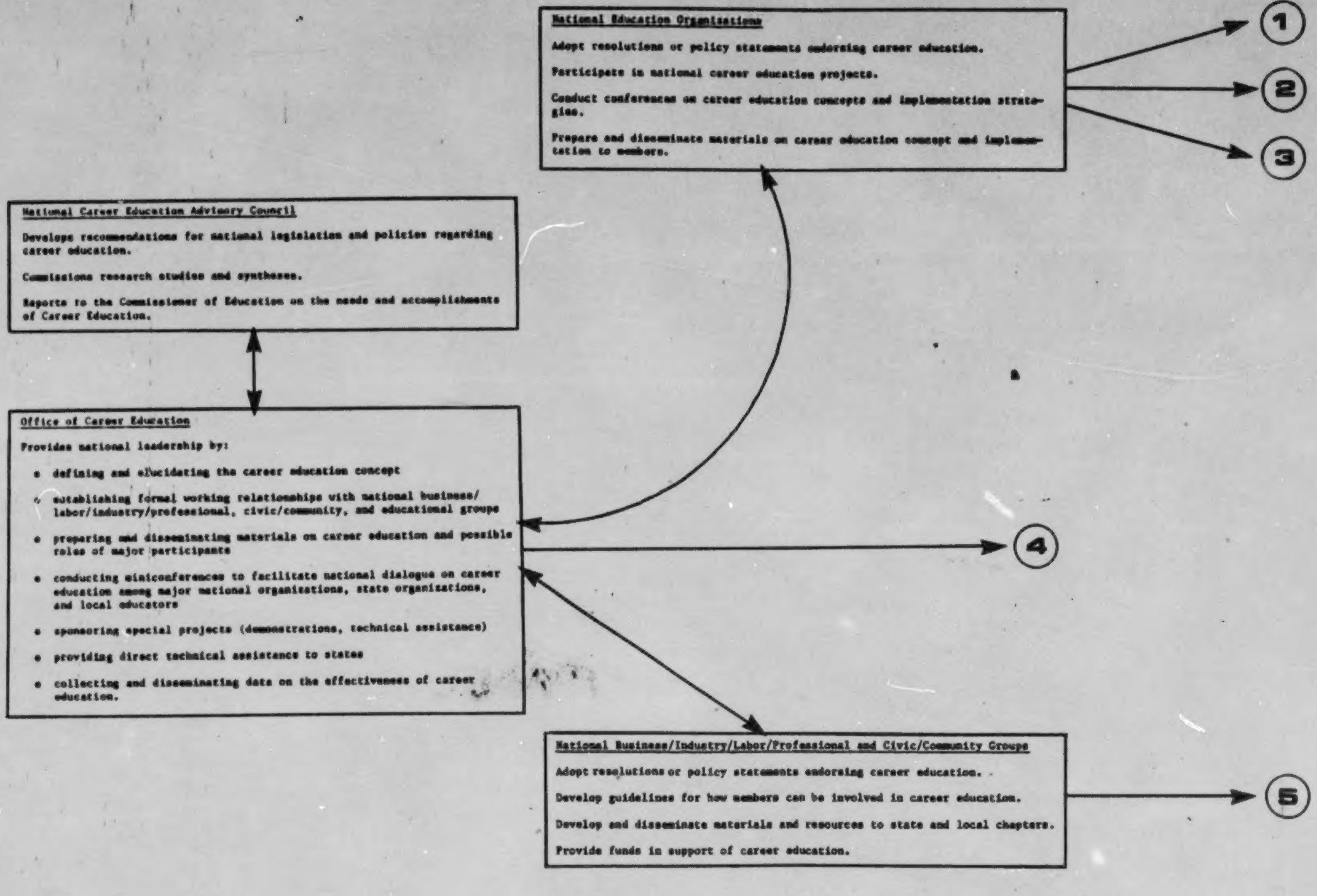
The functional model for direct and indirect interventions is based primarily on those programmatic activities that are either called for by the Act and are supported directly by PL 95-207 funds or are influenced by supported activities. Not included are activities clearly supported by other sources, even if they are sometimes referred to under the "career education" rubric. For example, "job skill training" is not included, because it is not one of the activities permitted by the law, nor are apprenticeship training, work study, or other types of paid employment/training activity often funded through vocational education or CETA programs.

Figures 4, 5, and 6 contain our preliminary representation of PL 95-207's functional elements. For ease of display, Figure 4 contains national-level activities, Figure 5 contains state- and intermediate-level activities, and Figure 6 contains local-level activities.

We have included in these Figures all those elements that we are reasonably certain are: (1) allowable under PL 95-207; (2) intended by the OCE program managers; and (3) are actually occurring in the field. Each arrow in the Figures represents a hypothesized causal relationship: the inputs of the "actors" in Box 1 will lead to those of the actors in Box 2; Box 2 inputs will cause those of Box 3; and so forth. *Thus, each box represents a set of outcomes for the activity with which it is directly linked*. Boxes connected with bidirectional arrows are mutually interrelated.

The evidence already garnered from our document reviews and site visits leads us to conclude that *all* of the hypothesized linkages in Figures 4, 5, and 6 exist in at least some of the sites where PL 95-207 funds are being used. And to the extent that the interventions listed can be documented, the major activities and outcomes of the PL 95-207 program are evaluable. Clearly, some activities/outcomes are more plausible than others. For example, many other factors are likely to influence career educations' learner outcomes, some of which (like home environment and socioeconomic status) are likely to be much stronger than the career education treatment. It is unlikely that evidence of changes in these outcomes *which can be attributed to career education* will be discernable in most implementation sites. As another example, given the paucity of resources apparently being devoted, it is doubtful whether we will find many institutions of higher education that are modifying their preservice teacher education curricula to incorporate career education concepts.

The determination of exactly which activities/outcomes to document and which linkages to validate will be made during the final months of this initial phase.



National Education Organizations

Adopt resolutions or policy statements endorsing career education.

Participate in national career education projects.

Conduct conferences on career education concepts and implementation strategies.

Prepare and disseminate materials on career education concept and implementation to members.

National Career Education Advisory Council

Develops recommendations for national legislation and policies regarding career education.

Commissions research studies and syntheses.

Reports to the Commissioner of Education on the needs and accomplishments of Career Education.

Office of Career Education

Provides national leadership by:

- defining and elucidating the career education concept
- establishing formal working relationships with national business/labor/industry/professional, civic/community, and educational groups
- preparing and disseminating materials on career education and possible roles of major participants
- conducting miniconferences to facilitate national dialogue on career education among major national organizations, state organizations, and local educators
- sponsoring special projects (demonstrations, technical assistance)
- providing direct technical assistance to states
- collecting and disseminating data on the effectiveness of career education.

National Business/Industry/Labor/Professional and Civic/Community Groups

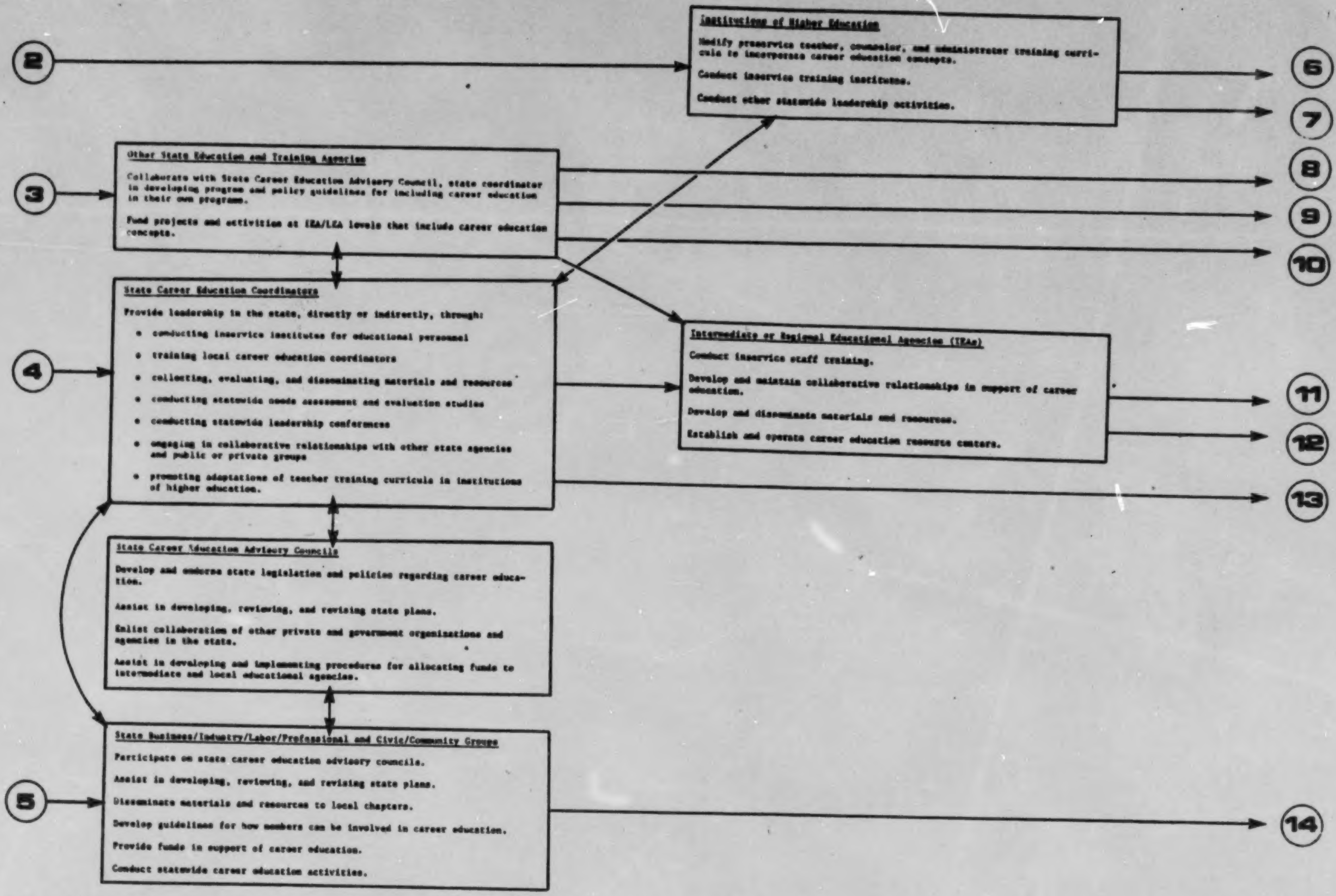
Adopt resolutions or policy statements endorsing career education.

Develop guidelines for how members can be involved in career education.

Develop and disseminate materials and resources to state and local chapters.

Provide funds in support of career education.

Figure 4. Preliminary Functional Model for National-Level Interventions



Institutions of Higher Education

Modify preservice teacher, counselor, and administrator training curricula to incorporate career education concepts.

Conduct inservice training institutes.

Conduct other statewide leadership activities.

Other State Education and Training Agencies

Collaborate with State Career Education Advisory Council, state coordinator in developing program and policy guidelines for including career education in their own programs.

Fund projects and activities at IEA/LEA levels that include career education concepts.

State Career Education Coordinators

Provide leadership in the state, directly or indirectly, through:

- conducting inservice institutes for educational personnel
- training local career education coordinators
- collecting, evaluating, and disseminating materials and resources
- conducting statewide needs assessment and evaluation studies
- conducting statewide leadership conferences
- engaging in collaborative relationships with other state agencies and public or private groups
- promoting adaptations of teacher training curricula in institutions of higher education.

Intermediate or Regional Educational Agencies (IEAs)

Conduct inservice staff training.

Develop and maintain collaborative relationships in support of career education.

Develop and disseminate materials and resources.

Establish and operate career education resource centers.

State Career Education Advisory Councils

Develop and endorse state legislation and policies regarding career education.

Assist in developing, reviewing, and revising state plans.

Enlist collaboration of other private and government organizations and agencies in the state.

Assist in developing and implementing procedures for allocating funds to intermediate and local educational agencies.

State Business/Industry/Labor/Professional and Civic/Community Groups

Participate on state career education advisory councils.

Assist in developing, reviewing, and revising state plans.

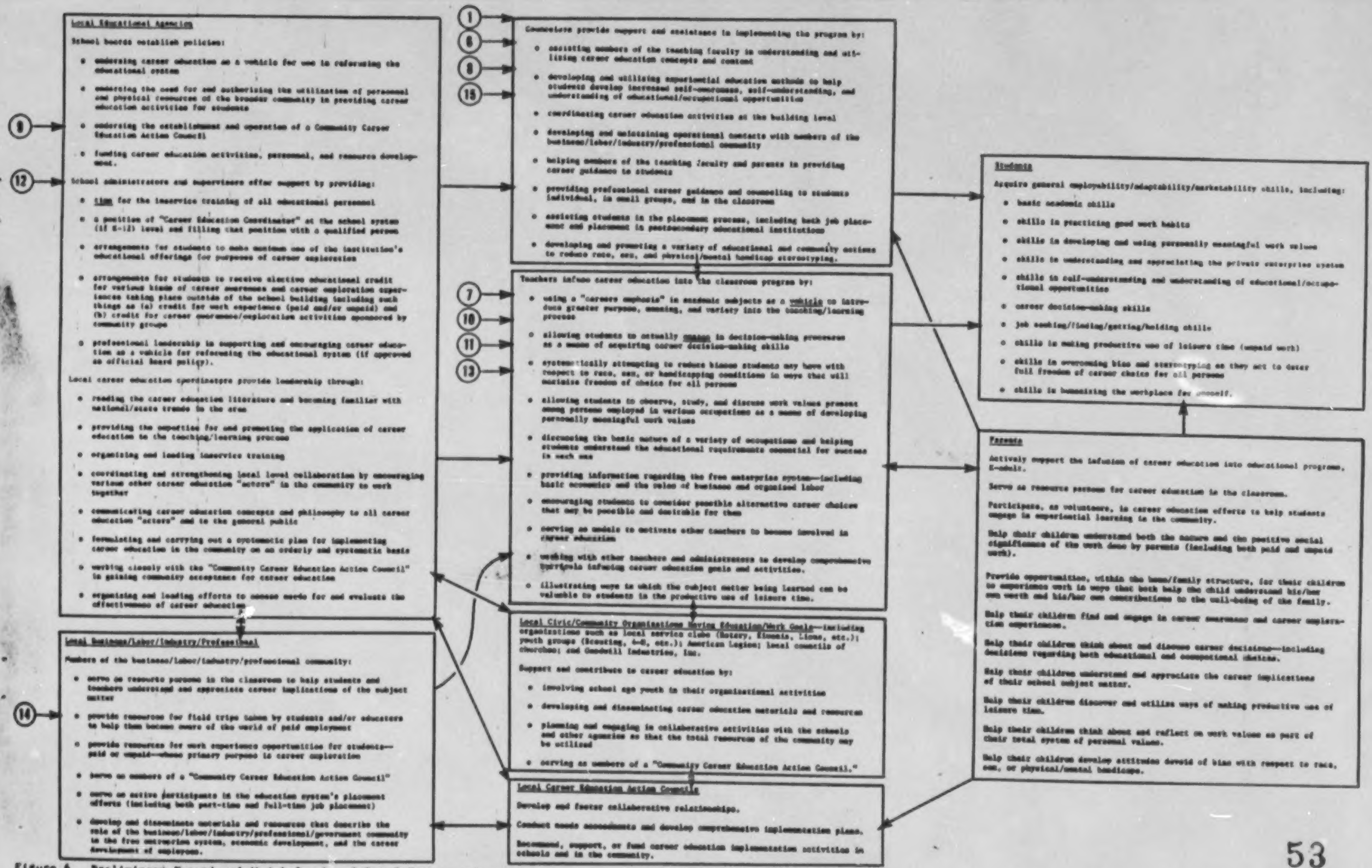
Disseminate materials and resources to local chapters.

Develop guidelines for how members can be involved in career education.

Provide funds in support of career education.

Conduct statewide career education activities.

Figure 5. Preliminary Functional Model for State- and Intermediate-Level Interventions



Local Educational Agencies

School boards establish policies:

- endorsing career education as a vehicle for use in reforming the educational system
- endorsing the need for and authorizing the utilization of personnel and physical resources of the broader community in providing career education activities for students
- endorsing the establishment and operation of a Community Career Education Action Council
- funding career education activities, personnel, and resource development.

School administrators and supervisors offer support by providing:

- time for the inservice training of all educational personnel
- a position of "Career Education Coordinator" at the school system (if K-12) level and filling that position with a qualified person
- arrangements for students to make maximum use of the institution's educational offerings for purposes of career exploration
- arrangements for students to receive elective educational credit for various kinds of career awareness and career exploration experiences taking place outside of the school building including such things as (a) credit for work experience (paid and/or unpaid) and (b) credit for career awareness/exploration activities sponsored by community groups
- professional leadership in supporting and encouraging career education as a vehicle for reforming the educational system (if approved as official board policy).

Local career education coordinators provide leadership through:

- reading the career education literature and becoming familiar with national/state trends in the area
- providing the expertise for and promoting the application of career education to the teaching/learning process
- organizing and leading inservice training
- coordinating and strengthening local level collaboration by encouraging various other career education "actors" in the community to work together
- communicating career education concepts and philosophy to all career education "actors" and to the general public
- formulating and carrying out a systematic plan for implementing career education in the community on an orderly and systematic basis
- working closely with the "Community Career Education Action Council" in gaining community acceptance for career education
- organizing and leading efforts to assess needs for and evaluate the effectiveness of career education

Local Business/Labor/Industry/Professional

Members of the business/labor/industry/professional community:

- serve as resource persons in the classroom to help students and teachers understand and appreciate career implications of the subject matter
- provide resources for field trips taken by students and/or educators to help them become aware of the world of paid employment
- provide resources for work experience opportunities for students—paid or unpaid—whose primary purpose is career exploration
- serve as members of a "Community Career Education Action Council"
- serve as active participants in the education system's placement efforts (including both part-time and full-time job placement)
- develop and disseminate materials and resources that describe the role of the business/labor/industry/professional/government community in the free enterprise system, economic development, and the career development of employees.

Counselors provide support and assistance in implementing the program by:

- assisting members of the teaching faculty in understanding and utilizing career education concepts and content
- developing and utilizing experiential education methods to help students develop increased self-awareness, self-understanding, and understanding of educational/occupational opportunities
- coordinating career education activities at the building level
- developing and maintaining operational contacts with members of the business/labor/industry/professional community
- helping members of the teaching faculty and parents in providing career guidance to students
- providing professional career guidance and counseling to students individual, in small groups, and in the classroom
- assisting students in the placement process, including both job placement and placement in postsecondary educational institutions
- developing and promoting a variety of educational and community actions to reduce race, sex, and physical/mental handicap stereotyping.

Teachers infuse career education into the classroom program by:

- using a "careers emphasis" in academic subjects as a vehicle to introduce greater purpose, meaning, and variety into the teaching/learning process
- allowing students to actually engage in decision-making processes as a means of acquiring career decision-making skills
- systematically attempting to reduce biases students may have with respect to race, sex, or handicapping conditions in ways that will maximize freedom of choice for all persons
- allowing students to observe, study, and discuss work values present among persons employed in various occupations as a means of developing personally meaningful work values
- discussing the basic nature of a variety of occupations and helping students understand the educational requirements essential for success in each one
- providing information regarding the free enterprise system—including basic economics and the roles of business and organized labor
- encouraging students to consider possible alternative career choices that may be possible and desirable for them
- serving as models to motivate other teachers to become involved in career education
- working with other teachers and administrators to develop comprehensive curricula infusing career education goals and activities.
- illustrating ways in which the subject matter being learned can be valuable to students in the productive use of leisure time.

Local Civic/Community Organizations Having Education/Work Goals—including organizations such as local service clubs (Rotary, Kiwanis, Lions, etc.); youth groups (Scouting, 4-H, etc.); American Legion; local councils of churches; and Goodwill Industries, Inc.

Support and contribute to career education by:

- involving school age youth in their organizational activities
- developing and disseminating career education materials and resources
- planning and engaging in collaborative activities with the schools and other agencies so that the total resources of the community may be utilized
- serving as members of a "Community Career Education Action Council."

Local Career Education Action Councils

Develop and foster collaborative relationships.

Conduct needs assessments and develop comprehensive implementation plans.

Recommend, support, or fund career education implementation activities in schools and in the community.

Students

Acquire general employability/adaptability/marketability skills, including:

- basic academic skills
- skills in practicing good work habits
- skills in developing and using personally meaningful work values
- skills in understanding and appreciating the private enterprise system
- skills in self-understanding and understanding of educational/occupational opportunities
- career decision-making skills
- job seeking/finding/getting/holding skills
- skills in making productive use of leisure time (unpaid work)
- skills in overcoming bias and stereotyping as they act to deter full freedom of career choice for all persons
- skills in humanizing the workplace for oneself.

Parents

Actively support the infusion of career education into educational programs, K-adult.

Serve as resource persons for career education in the classroom.

Participate, as volunteers, in career education efforts to help students engage in experiential learning in the community.

Help their children understand both the nature and the positive social significance of the work done by parents (including both paid and unpaid work).

Provide opportunities, within the home/family structure, for their children to experience work in ways that both help the child understand his/her own worth and his/her own contributions to the well-being of the family.

Help their children find and engage in career awareness and career exploration experiences.

Help their children think about and discuss career decisions—including decisions regarding both educational and occupational choices.

Help their children understand and appreciate the career implications of their school subject matter.

Help their children discover and utilize ways of making productive use of leisure time.

Help their children think about and reflect on work values as part of their total system of personal values.

Help their children develop attitudes devoid of bias with respect to race, sex, or physical/mental handicaps.

Figure 6. Preliminary Functional Model for Local-Level Interventions

One possible programmatic option not now found in Figures 4, 5, and 6 is the addition of activities aimed at successfully presenting evaluated career education projects to the Education Division's Joint Dissemination Review Panel (JDRP) and then getting them into the National Diffusion Network (NDN). NDN acceptance means that ESEA funds can be used to promote the adoption/adaptation of a project's activities in other sites. In a 25 September 1978 speech to National and State Career Education Advisory Council members, the OCE Director urged that at least one school system in every state should prepare and submit a JDRP submission; accepted projects would follow in the footsteps of nine career education projects that had been approved as of September 1979.

This option is presently ommitted because we found no evidence that any states were seriously considering it. But promoting and supporting the extraordinarily rigorous outcome evaluations required to attain JDRP approval may well be an allowable descretionary activity under PL 95-207, and securing JDRP approval may be an acceptable local option not requiring use of PL 95-207 funds. The desirability of adding this and other such options to the functional models will be explored with program managers in the immediate future.

Further Analysis of the PL 95-207 Program: Measurement Models and the "Evaluable" Program

Considerations in the Choice of Measures

In preparing measurement models for the PL 95-207 program, the AIR staff was concerned with identifying measures that could be used by program managers and policymakers. Since the program is authorized for only five years, and the degrees of freedom permitted for OCE in its administration are rather limited, we assumed that the most useful data at the federal level would be those which spoke to the effectiveness of funds already expended under the Act. This need was verified in our discussions with both stakeholders and OCE program managers. The objective of widespread nationwide implementation was widely viewed as unattainable unless federal appropriations more nearly matched the initial authorizations. All parties felt that data showing the effectiveness and efficiency of the program would be most useful to federal policymakers involved in the appropriation process. At this point, there was a predictable divergence of opinion. Some individuals we interviewed spoke of the desirability of data showing: the numbers of activities supported; the numbers of LEAs, schools, and teachers participating; the numbers and characteristics of parents and students "reached;" the amount of "new" state and local funding generated in support of PL 95-207 initiated activities; and the types and amounts of career education support committed by business, labor, industry, professional, civic, and community organizations. Others, influenced perhaps by more traditional approaches to program impact assessment, felt that data were most needed on the degree to which the program produced measurable gains in the learner outcomes associated with career education. We favored the former view for several reasons.

First, it is usually quite difficult to attribute learner outcome changes to an educational program, no matter how potent it might be. This is especially true for career education, whose intended learner outcomes are by no means unique. For example, "acquiring basic academic skills," or "developing good work habits" were common educational goals for decades before the birth of the career education movement. Many of career education's other learner outcomes are also similar to those of educational programs not now thought of as inherent parts of career education. Demonstrated gains on these outcomes may result from so many sources that the effects of a career education treatment are impossible to disaggregate. Moreover, considerable educational research has demonstrated that the bulk of the variance in measures of such outcomes can be accounted for by factors other than formal educational experiences (e.g., socio-economic status, home environment, early childhood learning opportunities).

Career education in this respect is not unlike all complex educational programs (e.g., ESEA Title I compensatory education, Head Start) that have been subjected to and often unsupported by impact evaluations over the past decade. Because such programs are part of a larger social milieu that more strongly affects most learner outcomes, large scale impact assessments have rarely found measurable differences that can be attributed to the program being evaluated.

Finally, collecting data on learner outcomes is a costly and time consuming process. To provide such information within the dual contraints of a very limited evaluation budget and the annual Congressional appropriations cycle is virtually impossible unless sound data are already available. During our site visits, we found very few states planning to invest in statewide career education outcome measurement. And even in these states, the planned assessment efforts focused on needs assessment purposes, and generally lacked adequate provisions to attribute measured learner outcome gains to PL 95-207 activities.

Concentrating on less "ultimate" measures, such as those mentioned first above, seemed to offer the twin benefits of being better able to (1) attribute assessed gains to the influence of PL 95-207 and (2) obtain and prepare data in time to be of use in FY81 Congressional appropriations hearings. In this respect, monitoring the flow of PL 95-207 funds is crucial, in order to separate out the effects of Career Education Incentive Act Programs from those resulting from other federal programs,[1] or state and local programs existing prior to its passage. Also crucial is the use of indicators that can be collected quickly and efficiently. For example, a sample survey of the nation's teachers might show the number (and percentage) that are using the "careers concept" in their academic instruction as a result of having attended a funded inservice training activity. But it is doubtful that such a survey can be either afforded or completed in time to be useful. Less expensive and more timely proxy measures are required.

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[1] In a 1978 report to the House Appropriations Subcommittee for Labor and DHEW, staff investigators indicated that between 1974 and 1978 over $160 million in federal funds other than those administered by OCE went in support of career education.

The Measurement Models

Using the above considerations, we examined each of the activity ⟶ outcome linkages indicated in the functional program model contained in Figures 4, 5, and 6 except those concerned with student outcomes. For each of the 113 hypothesized linkages, we identified a set of indicators or proxy measures that we felt would permit determinations of the extent to which: (1) the activity occurred; (2) the intended outcome occurred; and (3) the activity ⟶ outcome linkages could be empirically verified. Taken together with the functional program model, these indicators constituted the preliminary measurement models of the PL 95-207 program.

Obviously, some of the indicators we identified are more useful than others. Our final step in arriving at a model of the evaluable PL 95-207 program was to go back to the OCE program managers, asking them to judge the utility of our measurement models. (If the judgment had been that they lacked utility, or that any aspect of the functional model on which they were based was inaccurate or unacceptable, more revisions would have been required. Fortunately, this was not the case.)

The Evaluable PL 95-207 Program

Wholey (1979, p. 71) defines the "evaluable program" as that portion of the program for which: (1) plausible, measurable objectives have been devised; (2) feasible sources of performance data are available; and (3) likely management uses of program performance information have been determined. As we indicated earlier, all aspects of the PL 95-207 functional program model (Figures 4, 5, and 6) are plausible; some are more plausible than others, because of the influence of external events and the way resources are being allocated by the states. Furthermore, our measurement models contain evidence that each of the 113 hypothesized linkages in the functional model can be measured to a greater or lesser extent. But available resources would be insufficient to convert the measurement models into a viable evaluation design. Management utility thus became the critical consideration in identifying an evaluable program.

Table 6 contains the 40 major activity→outcome linkages and associated measures identified by OCE program managers as most crucial for evaluating PL 95-207 implementation. The remaining 73 elements of our measurement models are presented in Appendix E. Appendix E may be of interest to managers of state and local programs and others interested in evaluating career education activities at the state or local levels. Table 6 contains eight classes of information:

- Key Actor: the individual, organization, or class of people who perform the activity during implementation of the PL 95-207 program.
- Activity: what is to be done by the key actor.
- Intended outcome: the state of affairs that is to be brought about through accomplishing the activity successfully.
- Measures: potential indicators of: (1) the extent to which the activity occurred, (2) the extent to which the outcome occurred, and (3) the extent to which the activity-outcome linkage can be supported.
- Sources: the documents, places, or people from which each measure can be collected.
- Quantifiability: our judgment of the extent to which the measure-source pair leads to quantitative or qualitative data that can be scaled reliably.
- Potency: our judgment of the extent to which the data will be of value in assessing the activity-outcome linkage.
- Collection/processing ease: our global judgment of the effort required to obtain the data and put them into a useable form.

Table 6 will serve as the major focus for our work in Phase II, the short term evaluation of PL 95-207 implementation using available data sources.

Table 6

The PL95-207 Evaluable Program

The table that follows is arranged by the major actor groups contained in Figures 4, 5, and 6. They include only those activity → outcome linkages judged by OCE program managers as most crucial for evaluating PL95-207 implementation. Seventy-three other activity → outcome linkages, measures, and data sources, which were judged as less crucial, are included as Appendix E in this report.

Actor: Office of Career Education (OCE)

Activity	Intended Outcome	Measures	Data Source	Quantifiability	Potency	Collection/Processing Ease
1. Provide direct technical assistance (TA) to states	Increase in states' capability to implement CE	1. Number of technical assistance (TA) events	OCE documents (trip reports, memoranda, summaries)	High	Low	Easy
		2. Number of TA recipients	"	"	Moderately low	"
		3. Type of TA provided	Content analysis of OCE documents	Low	"	Relatively easy
		4. Speed & quality of response to state requests	Correspondence; state reports	Medium	"	Relatively difficult
		5. Usefulness of assistance provided	Interviews with OCE, state staff; documents incorporating results of assistance effort	Low	High	Difficult
2. Define and disseminate the career education concept	Career education concept is understood by key actors at national, state, and local levels	1. Number of OCE-prepared documents presenting CE goals, objectives, rationale	OCE files (monographs, publications, etc.)	High	Low	Easy
		2. Number of speeches given presenting CE conceptual framework	OCE files	"	"	"
		3. Number and sizes of audiences reached by speeches	"	"	Moderate	"
		4. Number of citations to items 1 & 2 above	Literature search: SSCI	"	Moderately high	Average difficulty
		5. Number of miniconferences held on CE concept	Miniconference (schedules, agendas)	"	Low	Easy
		6. Number of attendees at miniconferences in item 5 above	Minutes of miniconferences	"	Moderate	"
		7. Accuracy of CE concept represented in pronouncements, publications, etc. of national, state and local agencies	Literature search of regulations, resolutions, state & local plans, etc.	Medium	High	Relatively difficult

Actor: National Advisory Council on Career Education (NACCE)

Activity	Intended Outcome	Measures	Data Source	Quantifiability	Potency	Collection/Processing Effort
1. Develops recommendations for national legislation and policies regarding career education	Congress incorporates recommendations in legislation/appropriations aimed at facilitating widespread CE implementation; OE/OCE incorporates recommendations in administration of CE program	1. Number of policy or position statements adopted	Minutes of NACCE meetings	High	Low	Easy
		2. Specificity of recommendations	Examination of documents	Medium	"	Relatively difficult
		3. Extent to which recommendations can be implemented under current budgets/laws/systems	"; legislation and current budgets	"	Moderate	Difficult
		4. Extent to which recommendations are acted upon	Examination of legislation, appropriations, OCE program plans	"	High	Average difficulty
2. Reports to Commissioner of Education on the needs and accomplishments of career education	Commissioner of Education incorporates information in program plans and budget requests	1. Number of written & oral reports made	NACCE, OE files	High	Low	Easy
		2. Extent to which specific needs & accomplishments are identified	Examination of written reports, transcripts of meetings; reports by Council, OE members/staff	Medium	Moderately low	Average difficulty
		3. Extent to which needs and accomplishments are documented	"	"	"	"
		4. Extent to which identified needs are addressed and accomplishments are cited in OE plans & reports	Review of OE program plans and budget request justifications	"	High	"

Actor: National Business, Labor, Industry, Professional (BLIP) and Civic, Community (CC) Groups

Activity	Intended Outcome	Measures	Data Source	Quantifiability	Potency	Collection/Processing Ease
1. Adopt resolutions or policy statements endorsing CE	Congress, state and local groups, community in general will know of BLIP, CC endorsement	1. Number of organizations passing resolutions	Literature search, examination of records, reports of meetings	High	Low	Relatively easy
		2. Strength of commitment/support reflected in resolutions	Examination of resolutions	Medium	Moderately low	Average difficulty
		3. Distribution of resolutions to state/local chapters	Records of national, state, and local organizations	"	Moderate	"
		4. Publication of resolutions, or announcements of their adoption	Examine media, organizational newsletters or publications	"	"	"
		5. Incorporation of resolutions in Congressional hearings	Review committee hearings, reports	"	High	"
2. Develop & disseminate materials/resources to state and local chapters	State & local chapters receive and utilize materials in CE activities	1. Number & type of organizations developing/distributing materials	Organization's files; reports of staff	High	Low	Relatively easy
		2. Type of materials/resources (instructional resources for students, teachers; samples)	Examination of materials	Low	"	Average difficulty
		3. Perceived utility of materials	Reports of users (state/local groups, teachers, students)	Medium	Moderately low	Difficult
		4. Nature and extent of dissemination effort	Organizations' files, reports of staff	Low	Moderate	Relatively difficult
		5. Size/scope of audience reached	Organizational mailing lists, records	High	Moderately low	Relatively easy
		6. Extent and way materials used at state, local level	State/local organization files; reports of staff (critical incidents)	Low	Moderately high	Difficult

Actor: National Education Organizations (NEOs)

Activity	Intended Outcome	Measures	Data Source	Quantifiability	Potency	Collection/Processing Ease
1. Adopt resolutions or policy statements endorsing CE	Congress, state and local organizations, community in general will know of endorsement by NEOs.	1. Number of organizations adopting resolutions	Examine organizations' records, OCE records	High	Low	Relatively easy
		2. Strength of commitment/support reflected in resolutions	Examine resolutions	Medium	"	Average difficulty
		3. Distribution or announcement of resolutions to state/local chapters	Organizations' mailing lists; state/local chapters records	"	Moderate	"
		4. Other publication or announcement of resolutions	Examine media, organizational newsletters or publications	"	"	"
		5. Incorporation of resolutions in Congressional hearings	Review Committee hearings, reports	"	High	"
2. Prepare and disseminate materials on CE concept and implementation to members	Stimulate commitment to CE and CE activity among members	1. Number and type of organizations preparing and distributing materials	Organizations' records, OCE records	High	Low	Relatively easy
		2. Type of materials developed	Examination of materials	Low	"	Average difficulty
		3. Perceived utility of materials	Reports of recipients	Medium	Moderately low	Relatively easy
		4. Nature and extent of dissemination effort	Organizations' records	Low	Moderate	Difficult
		5. Size/scope of audience reached	Organizations' mailing lists, records	High	"	Relatively easy
		6. Nature and extent of use of materials in CE activities	Reports of recipients (critical incidents)	Low	High	Difficult

Actor: State Career Education Coordinator (CEC) -- leadership

Activity	Intended Outcome	Measures	Data Source	Quantifiability	Potency	Collection/Processing Ease
1. Engage in collaborative relationships with other state agencies and public or private groups	State education agencies and public/private groups continue to support and invest in CE in the state	1. Number & type of agencies/groups involved in CE program at state level	State plan, annual report; state records	High	Low	Easy
		2. Nature of involvement sought (advisory, implementation)	"; reports by staff, groups/agencies	Low	Moderate	Relatively difficult
		3. Size/composition of state CE advisory council	State plan, annual report	High	High	Easy
		4. Nature and extent of CE activity initiated by agencies/groups	(Same as 2)	Medium	High	Relatively difficult
		5. Extent of agencies' and groups' commitments/investment in CE	State records and budgets; reports by agencies/groups	Medium	Low	Easy
2. Conduct inservice institutes for educational personnel	Develop awareness of and commitment to CE among participants; develop skills in implementing CE at regional or local level	1. Number of institutes conducted	State records, annual report	High	Low	Easy
		2. Number of individuals involved in each	Records of institutes (e.g., attendance lists)	"	Moderately low	"
		3. Type of individuals involved	"	Low	Low	Relatively easy
		4. Objectives/content focus	Institute agenda, handouts; reports by staff, participants; observation of institute	"	Moderate	"
		5. Extent of utilization of what is learned	Critical incidents reported by participants; observation of participants; examine subsequent educational policies/instructional plans of participants	Medium	High	Difficult

Actor: State Career Education Coordinator (CEC) -- Program Administration

Activity	Intended Outcome	Measures	Data Source	Quantifiability	Potency	Collection/Processing Ease
1. Developing funding guidelines & strategies	Funds are allocated to LEAs so that (a) CE is implemented at local and regional levels and (b) national and state priorities are addressed	1. Specificity of guidelines	Guidelines/RFP	Medium	Moderately low	Average difficulty
		2. Nature & extent of dissemination of application guidelines	Mailing lists; state CE records	"	Moderate	Relatively easy
		3. Extent of notice given prior to application deadline	RFP or guidelines	High	"	Easy
		4. Weighting given to combatting bias/stereotyping and to comprehensive counseling/guidance services	"	Medium	Moderately high	"
		5. Weighting given to designated state priorities	"	"	"	"
		6. Extent other educational, BLIP, & CC groups were involved in developing guidelines	State CEC records	"	Moderately low	Relatively easy
2. Conducting and reporting evaluations	Data available for use in assessing state's activities to date and in revising state plans	1. Number of evaluations reported	Evaluation reports, CEC files	High	Low	Easy
		2. Data gathered on activities conducted	"	Low	Moderately high	"
		3. Data gathered on outcomes associated with activities	"	"	"	"
		4. Design provides for attributing observed outcome gains to specific CE activities	"	"	High	"

(continued)

Actor: State CEC -- Program Administration (continued)

Activity	Intended Outcome	Measures	Data Source	Quantifiability	Potency	Collection/Processing Ease
2. (continued)		5. Extent of planned usage of data	Evaluation reports, CEC files; reports by state CEC	Medium	Moderate	Relatively easy
		6. Extent data are used in modifying state plans, activities	Comparison of pre- and post-plans	Medium	High	Relatively difficult

Actor: State Career Education Advisory Council

Activity	Intended Outcome	Measures	Data Source	Quantifiability	Potency	Collection/Processing Ease
1. Develop and endorse state legislation and policies regarding CE	Enactment of state legislation which receives support by BLIP, CC, and Advisory Council	1. Resolution in support of CE adopted	Minutes of Council meeting	Low	Low	Easy
		2. Number of BLIP, CC groups endorsing resolution	Number of specific BLIP and CC groups endorsing legislation/policies	High	Moderate	"
		3. Strength of endorsement by BLIP, CC	Minutes of Council meeting; interviews	Medium	"	Average difficulty
		4. Passing of legislation	Examination of legislation	Low	High	Easy
2. Enlist collaboration of other private and government organizations and agencies in the state	Widespread support from and involvement of state BLIP & CC groups	1. Established procedures for involving groups	Minutes of council meetings, reports of council members	Low	Low	Easy
		2. Type of involvement sought	"	"	"	"
		3. Number of individuals/groups contacted	"	High	Moderately low	Average difficulty
		4. Number of individuals/groups involved	"	High	Moderate	"
		5. Level(s) of involvement obtained	Documents from involved groups	Medium	High	"

Actor: State Business, Labor, Industry, Professional (BLIP) and Civic, Community (CC) Groups

Activity	Intended Outcome	Measures	Data Source	Quantifiability	Potency	Collection/Processing Ease
1. Develop/disseminate guidelines for how members can be involved in CE	Local members/chapters receive and follow guidelines	1. Number and type of organizations developing guidelines	Organizations' records; reports of staff	High	Low	Easy
		2. Fidelity of guidelines to CE concept	Examine guidelines, reports of staff	Medium	Moderately low	Average difficulty
		3. Specificity of guidelines	Examination of guidelines	"	"	"
		4. Distribution of guidelines	Examination of records of state group; reports of staff	"	"	Relatively easy
		5. Size/scope of audience reached	Group files, mailing lists	High	Moderate	"
		6. Extent guidelines are followed	Examination of members files; observations; reports of members (critical incidents)	Low	Moderately high	Relatively difficult
		7. Perceived feasibility/utility of guidelines	Reports of members	"	Moderately low	Relatively easy
2. Conduct statewide workshops, seminars, meetings to promote CE	Enhance capability of BLIP/CC groups and educators at state/local level to implement career education	1. Number, type of groups conducting activities	Group records	High	Low	Easy
		2. Number, type of activities conducted (e.g., workshop, work experience program, needs assessment)	"	High	Moderately low	"
		3. Number of LEAs, teachers, students, others involved	"	High	Moderate	Relatively easy
		4. Perceived value to participants	Interviews, reports	Low	Moderately low	Relatively difficult

Actor: Other State Education/Training Agencies

Activity	Intended Outcome	Measures	Data Source	Quantifiability	Potency	Collection/Processing Ease
1. Collaborate with State CEC and Advisory Council in developing program and policy guidelines for indluding CE in their own programs	Program and policy guidelines are disseminated to and used by LEA personnel to infuse CE into various educational programs and curriculum areas	1. Number of agencies represented on advisory panel	Advisory council membership lists	High	Low	Easy
		2. Number of agencies assigning staff to work with State CEC on planning, implementation	State agency records; reports by State CEC	"	Moderately low	"
		3. Number of agencies involved in development/revision of State plan	State plan acknowledgments	"	"	"
		4. Number of agencies incorporating CE concepts in curriculum plans/objectives	Curriculum guides, objective lists	"	Moderate	Relatively difficult
		5. Number of agencies providing materials or guidelines on (a) infusion of CE concepts, (b) developing collaborative relationships, (c) implementing comprehensive guidance and counseling programs, or (d) eliminating bias and stereotyping	Agency files; reports by State CEC	"	"	Relatively easy

(continued)

Actor: Other State Education/Training Agencies (continued)

Activity	Intended Outcome	Measures	Data Source	Quanti-fiability	Potency	Collection/Processing Ease
2. Fund projects and activities at IEA/LEA levels that include CE concepts	CE becomes an integral element in various educational programs/curriculum areas at IEA/LEA level	1. Number of projects funded	Agency records	High	Low	Easy
		2. Magnitude of funding (total, average per project)	"	"	"	"
		3. Extent CE concepts are implicit or explicit in funded projects/activities	Project/activity descriptions	Medium	Moderate	Relatively difficult
		4. Extent funded projects contribute to (a) infusion of CE concepts, (b) developing collaborative relationships, (c) implementing comprehensive guidance and counseling programs, or (d) elimination of bias and stereotyping	"	"	High	Difficult

Actor: Institutions of Higher Education (IHE)

Activity	Intended Outcome	Measures	Data Source	Quantifiability	Potency	Collection/Processing Ease
1. Modify preservice teacher, counselor and administrator training curricula to incorporate CE concepts	Teachers/counselors/administrators leave graduate school with information and skills necessary to infuse CE into curriculum and to work effectively with BLIP or CC groups	1. Number teacher, counselor, and administrator training programs incorporating CE concepts	Program descriptions and curricula of various IHEs; reports of IHE administrators	High	Low	Relatively easy
		2. Extent to which programs address (a) infusion, (b) collaboration, (c) comprehensive guidance and counseling programs, (d) elimination of bias and stereotyping	"	Medium	Moderately low	Relatively difficult
		3. Number/percent of specific teacher/counselor/administrator roles covered	"	High	"	Relatively difficult
		4. Extent major topics and roles covered	"	Medium	"	Relatively difficult
		5. Number of teachers/counselors/administrators in programs	IHE records	High	Moderate	Easy
		6. Number/percent of teachers/counselors/administrators mastering skills/concepts taught	Student grades; observations, special assessment	"	Moderately high	Difficult
		7. Number/percent of teachers/counselors/administrators applying or using skills and knowledge in their work	Observation of work performed and associated materials; reports by individuals	"	High	"

(continued)

Actor: Institutions of Higher Education (continued)

Activity	Intended Outcome	Measures	Data Source	Quantifiability	Potency	Collection/Processing Ease
2. Conduct inservice training institutes	Teachers/counselors/administrators acquire knowledge/skills to infuse CE into curriculum & to work effectively with BLIP & CC groups	1. Number of inservice programs offered	IHE records; reports by staff	High	Low	Easy
		2. Number of IHEs offering inservices	"	"	"	"
		3. Number of teachers/counselors/administrators participating	"	"	Moderate	"
		4. Extent to which each inservice addresses (a) infusion, (b) collaboration, (c) guidance and counseling, and (d) elimination of bias/stereotyping	Workshop objectives, materials	Medium	Moderately low	Relatively easy
		5. Number/percentage of major teacher/counselor/administrator roles covered	"	High	"	"
		6. Number/percentage of teachers/counselors/administrators mastering skills/concepts taught	Workshop assessments; observation; special assessments	"	Moderately high	Relatively difficult
		7. Number/percentage of teachers/counselors/administrators applying or using skills and knowledge in their work	Observation of work performed and associated materials; reports by individuals	"	High	Difficult

Actor: Intermediate Education Agency (IEA)

Activity	Intended Outcome	Measures	Data Source	Quantifiability	Potency	Collection/Processing Ease
1. Conduct inservice staff training	Educational personnel develop attitudes, knowledge, skills necessary for implementing CE at local level	1. Number of training programs/sessions held	Intermediate Education Agency records	High	Low	Easy
		2. Number of individuals involved in each	"	"	Moderate	"
		3. Type of individuals involved (e.g., teacher, counselor, administrator)	"	Low	"	Relatively easy
		4. Extent addresses (a) infusion, (b) collaboration, (c) establishing comprehensive guidance and counseling, & (d) elimination of bias/stereotyping	Workshop agenda, materials, observations	Medium	Moderately low	"
		5. Number/percent of major intended roles of participants covered	"	High	"	"
		6. Number/percent of participants mastering concepts /skills presented	Workshop assessments; observations; special assessments	"	High	Difficult
		7. Number/percent of participants applying or using concepts/skills presented	Observations of performance and related materials; special assessments	"	"	"
2. Develop and disseminate materials and resources	Increase capability of local educators to implement career education in the classroom	1. Number and type of materials developed (e.g., teacher guides, student texts or workbooks, audio/visual materials)	Intermediate Education Agency records	High	Low	Easy

(continued)

Actor: Intermediate Education Agency (IEA) (continued)

Activity	Intended Outcome	Measures	Data Source	Quantifiability	Potency	Collection-Processing Ease
2. (continued)		2. Extent materials demonstrate infusion of career concepts	Examination of materials	Medium	Moderately low	Relatively easy
		3. Extent materials demonstrate (strategies for) elimination of bias/stereotyping	"	"	"	Relatively easy
		4. Means of disseminating materials	IEA records	Low	Low	Easy
		5. Extent of dissemination effort (number of recipients)	IEA mailing lists	High	Moderately low	"
		6. Number of individuals receiving or obtaining materials	IEA records	"	Moderate	Relatively difficult
		7. Number of individuals using materials and extent of use	Observations of performance and associated materials; reports by individuals	"	High	Difficult
		8. Extent to which materials are evaluated prior to dissemination (are criteria specified, are objective data obtained?)	IEA records	Medium	Moderately low	Relatively easy

Actor: Local Business, Labor, Industry, Professional (BLIP) Groups

Activity	Intended Outcome	Measures	Data Source	Quantifiability	Potency	Collection/Processing Ease
1. Provide resources for work experience opportunities for students--paid or unpaid--whose primary purpose is career education	Increase students' understanding of world of paid employment and of tasks involved in specific field	1. Number of BLIP groups offering to provide work experience opportunities	LEA records	High	Low	Easy
		2. Number of BLIP groups providing work experience opportunities	"	"	"	"
		3. Number of students participating in BLIP work experience opportunities	"	"	Moderate	"
		4. Students' understanding of world of paid employment	Student reports; tests	"	High	Difficult
		5. Students' knowledge about particular career field	"	"	"	"
2. Develop & disseminate materials & resources that describe the role of the BLIP/government community in the free enterprise system, & career development of employees	Students use materials to develop an understanding of the economic system, the role of various groups within that system, and the career development patterns of employees in various fields	1. Number of BLIP groups providing materials on economic system and/or roles of groups within that system	Review of classroom materials; reports by teachers	High	Low	Relatively difficult
		2. Extent materials designed for or amenable to infusion in academic curriculum (e.g., contain references to subject matter areas)	Examine materials	Low	Moderately low	"

(continued)

Actor: Local BLIP Groups (continued)

Activity	Intended Outcome	Measures	Data Source	Quantifiability	Potency	Collection/Processing Ease
2. (continued)		3. Extent materials developed for full grade range (K-12)	Examine materials	Medium	Moderately low	Easy
		4. Extent of availability of materials	Reports by teachers/administrators; reports by BLIP groups; statements of dissemination or acquisition procedures	"	Moderate	"
		5. Extent of students' understanding of economic system, roles of groups within that system, and/or career development patterns in particular field	Student tests	High	High	Difficult
		6. Extent materials used in classroom or learning activities	Observations; reports by teacher, student; examine lesson plans	Medium	"	Relatively difficult

Actor: Local Civic, Community (CC) Groups

Activity	Intended Outcome	Measures	Data Source	Quantifiability	Potency	Collection/Processing Ease
1. Plan & engage in collaborative activities with the schools and other agencies	CC Groups are actively involved in planning and implementing CE programs	1. Number of CC groups represented on local CEAC	CEAC membership list	High	Low	Easy
		2. Number of CC groups represented on task forces or other working committees relating to CE	List of members of task forces, committees	"	Moderate	"
		3. Number of CC groups involved in non-CE school activities	"	"	"	"
		4. Number of CC groups involved in developing local CE plan	Plan & related documents	"	"	"
		5. Number of CC groups endorsing plan	Plan; LEA/local CEC records	"	Low	"
2. Serve as members of a community career education action council (CEAC)	Ensure that CC groups work with school & BLIP groups in planning & implementing CE program	1. Number of CC groups represented on CEAC	CEAC membership list	High	Low	Easy
		2. Number of official CEAC positions (e.g., chairperson) filled by CC representatives	CEAC membership list & record of officers	"	Moderate	"
		3. Number of CC groups expressing interest in serving on CEAC	Local CEC records re establishment of CEAC	"	Low	Relatively easy

Actor: Local Career Education Action Councils (CEACs)

Activity	Intended Outcome	Measures	Data Source	Quantifiability	Potency	Collection/Processing Ease
1. Develop and foster collaborative relationships	Local BLIP and CC groups are actively involved in the implementation of CE at the local level	1. Number of BLIP and CC groups represented on council	Council membership list	High	Low	Easy
		2. Number of additional BLIP and CC groups with whom contact is maintained (e.g., via mailings)	Council records	"	"	"
		3. Recommendations for specific actions for each group of actors are developed	"	Low	Moderate	"
		4. Number of BLIP and CC groups actively participating in CE program	Council, LEA records	High	High	Average difficulty
2. Recommend, support, or fund CE implementation activities in schools and local community	Specific roles for each group of actors in the implementation of CE at the local level are identified and carried out	1. Number of groups of actors for whom recommendations of specific activities are developed	Council records	High	Moderately low	Relatively easy
		2. Types of assistance provided to major actors by Council (ideas, staff time, materials, funds)	"	Low	Moderate	"
		3. Extent of resources (materials, funds, facilities) collected by council	"	Medium	"	"
		4. Number of BLIP and CC groups involved in implementing CE plan	"	High	High	Average difficulty

Actor: LEA--School Board

Activity	Intended Outcome	Measures	Data Source	Quantifiability	Potency	Collection/Processing Ease
1. Endorse CE as a vehicle for use in refocusing the educational system	LEAs commit resources (staff, time, funds) to implementation of career education	1. Resolution in support of CE is adopted	School Board minutes	Low	Low	Easy
		2. Extent of support evidenced	"	Medium	Moderately low	Relatively easy
		3. Local funds are committed for CE activities	School Board minutes, LEA budgets	High	High	"
		4. Approval of local CE plan	Examine plan	"	Low	Easy
2. Endorse the need for and authorize the use of personnel and resources of the broader community in providing CE activities for students	Local BLIP and CC groups become actively involved in implementation of CE	1. Resolutions supporting involvement of BLIP and CC groups in schools are adopted	School Board minutes	Low	Low	Easy
		2. Strength of support	"	"	Moderately low	Relatively easy
		3. Specific approval is given for involvement of BLIP and CC groups in school program	"	Medium	"	"
		4. Recommendations for how to involve BLIP and CC groups are developed	"	"	Moderate	"

Actor: LEA--Administrators

Activity	Intended Outcome	Measures	Data Source	Quantifiability	Potency	Collection/Processing Ease
1. Provide time for inservice training of all educational personnel	Enable staff to acquire knowledge and skills to implement career education in district/classroom	1. Number of days release time per year per teacher provided for career education training	LEA yearly schedule; teacher time logs	High	Moderately low	Easy
		2. Number of afternoon or weekend career education training sessions held per year	LEA schedule	"	"	"
		3. Number of teachers per school given release time to attend training	Teacher time logs; reports by teachers	"	"	"
		4. Number of teachers receiving inservice training in career education concept and implementation skills	LEA/School time records; reports by teachers	"	Moderate	"
2. Provide professional leadership in supporting and encouraging career education as a vehicle for refocusing the educational system	Develop commitment to career education among LEA personnel, resulting in implementation of career education throughout system	1. Number of conferences, workshops, or meetings on career education held with district personnel	LEA records	High	Low	Easy
		2. Number of materials/documents on career education concept and implementation distributed to district personnel	"	"	"	"
		3. Number of personnel involved in meetings, workshops, etc.	"	"	Moderate	"
		4. Number of recommendations for funding of career education activities submitted or approved	"	"	"	"

Actor: LEA--Local Career Education Coordinator (CEC)

Activity	Intended Outcome	Measures	Data Source	Quantifiability	Potency	Collection/Processing Ease
1. Provides expertise for and promotes application of CE to the teaching/learning process	Teachers, counselors, and administrators at building level work to infuse CE into curriculum	1. Existence of guidelines for infusion of CE into classroom	LEA records	Low	Low	Easy
		2. Grade levels covered	"	High	Moderately low	"
		3. Subject or curriculum areas covered	"	"	"	"
		4. Number of workshops or inservices conducted by CEC on infusion	LEA schedule, calendar	"	Low	"
		5. Number of informal meetings held on infusion	Reports by CEC; calendar	"	"	"
		6. Number of times CEC is consulted as resource on strategies for infusion	Reports by CEC	"	Moderate	Relatively easy
		7. Number of CE materials/resources identified and disseminated to staff by CEC	CEC records; reports by CEC, staff	"	Moderately low	"
		8. Extent CE is infused in classroom	Observation, reports, lesson plans	Low	High	Relatively difficult
		9. Extent counselors implement CE	Observation, reports, interviews	"	High	"

(continued)

Actor: LEA--Local CEC (continued)

Activity	Intended Outcome	Measures	Data Source	Quantifiability	Potency	Collection/Processing Ease
2. Coordinate and strengthen local level collaboration by encouraging various other CE "actors" in the community to work together	Other actors involved in implementation of CE in community	1. Number of BLIP & CC groups contacted by CEC re involvement in CE program	CEC correspondence, records	High	Low	Easy
		2. Number of BLIP & CC groups becoming involved in CE program	"	High	Moderate	Easy
		3. Extent of each BLIP & CC group's involvement	Reports by CEC, groups; records of BLIP and CC group activities	Low	High	Relatively difficult
		4. Number of presentations made to BLIP & CC groups	CEC records, calendar	High	Low	Easy

Actor: Teachers

Activity	Intended Outcome	Measures	Data Source	Quanti-fiability	Potency	Collection/Processing Ease
1. Use a "careers emphasis" in academic subjects as a vehicle to introduce greater purpose, meaning, & variety into the teaching-learning process	Students improve both their academic skills and their understanding of how these subjects relate to the world of work	1. Number of teachers using a "careers emphasis" at all in their instruction	Examine lesson plans; observation of teachers; teacher reports	High	Low	Relatively difficult
		2. Extent of "careers emphasis"	"	Medium	Moderate	Difficult
		3. Number/percentage of subject areas in which "careers emphasis" is used	"	High	"	Relatively difficult
		4. Number/percentage of grades in which "careers emphasis" is used	"	"	"	"
		5. Student improvement in academic skills &/or in how subjects relate to work	Teacher reports; student assessments	"	High	Difficult
2. Systematically attempt to reduce biases students may have with respect to race, sex, or handicapping conditions in ways that will maximize freedom of choice for all persons	Students evaluate & decide among career options free from bias/stereotyping	1. Extent instructional materials used are free of bias/stereotyping	Examine materials	Variable	Low	Relatively difficult
		2. Extent teacher's oral instruction is free from bias/stereotyping	Teacher reports; observation of teachers	"	Moderately low	Difficult
		3. Extent teacher tries to explicitly counter prevailing biases/stereotypes by presenting objective information about career requirements	"	"	Moderately high	"
		4. Extent of students' conformity to bias/stereotyping	Teacher reports; observation; student assessments	Low	High	"

Actor: Counselors

Activity	Intended Outcome	Measures	Data Source	Quantifiability	Potency	Collection/Processing Ease
1. Assist members of the teaching faculty to understand and use CE concepts and content	Teachers understand philosophy and objectives of CE & implement it in their classrooms	1. Number of meetings or workshops held by counselors to aid teachers in understanding CE concepts and content	School calendar, schedule; minutes of faculty meetings; reports by counselors, teachers	High	Low	Relatively difficult
		2. Number of informal consultations with teachers on CE concepts and content	Counselors' daily calendars; reports by teachers, counselors	"	"	"
		3. Number/percentage of counselors involved in development of CE curriculum	"Credits" in CE curriculum plan; reports by counselors	High	Moderate	Relatively easy
		4. Number/percentage of counselors involved in assisting teachers	All of the above	"	Low	"
		5. Teachers' understanding and implementation	Reports by teachers	Low	High	Difficult
2. Develop and utilize experiential education methods	Students develop increased self-awareness, self-understanding, and understanding of educational/occupational opportunities	1. Number of experiential education opportunities offered to students during year	Counselors' records, daily calendars	High	Low	Easy
		2. Number of students participating in such opportunities during the year	"	"	Moderate	Relatively easy
		3. Number/percentage of counselors involved in developing and using experiential education methods	"	"	Low	Easy

(continued)

Actor: Counselors (continued)

Activity	Intended Outcome	Measures	Data Source	Quantifiability	Potency	Collection/Processing Ease
2. (continued)		4. Extent experiential learning activities provide opportunity for student to learn about own abilities/interests/values	Examine plans, materials for learning activities; observe activities	Low	Moderate	Difficult
		5. Extent experiential learning activities provide opportunity for student to learn about specific education/work opportunities	"	"	"	"

Actor: Parents

Activity	Intended Outcome	Measures	Data Source	Quantifiability	Potency	Collection/Processing Ease
1. Help their children understand both the nature and the positive social significance of the work done by parents (paid & unpaid work)	Children develop awareness of different occupations and understanding of how our social/economic system operates	1. Number of times parents have brought children to visit their place of employment	Reports by parents; reports by students	High	Low	Moderately difficult
		2. Number of times parents discuss the kind of work they do with their children	"	"	Moderate	"
		3. Extent to which parents point out social significance of their work	"	"	"	Difficult
		4. Student understanding of occupations and functioning of socioeconomic system	Student assessments	"	High	"
2. Provide opportunities within the home/family structure for children to experience work	Children understand their own work and contributions to the well-being of the family	1. Children given jobs around the home to be responsible for	Reports by parents, children	Variable	Low	Difficult
		2. Children paid for doing their jobs	"	High	Moderate	Easy
		3. Children receive an allowance not associated with amount of work done or quality of performance	"	"	"	"
		4. Amount of pay/reward associated with amount of work done or quality of performance	"	Low	"	Difficult
		5. Children perceive themselves as contributing members of the family	Reports by children; student assessments	Low	"	"

APPENDIX A

Stakeholder Groups and State Coordinators Interviewed

Business/Industry/Labor Groups

U.S. Chamber of Commerce
AFL/CIO
National Association for Industry-Education Cooperation
United Auto Workers
National Small Business Association
* National Alliance of Business
* National Manpower Institute

Career Education Specialists

Educational Commission of the States
* National Association for Career Education
* Alliance for Career Education
National Center for Career Education
National Advisory Council for Career Education
Northwest Connection

Community/Special Interest Groups

Parents and Teachers Association
Girl Scouts of America
American Association of Retired Persons
Women's American ORT
American Legion
National Advisory Council for Women's Educational Programs

Educational Practitioner Organizations

Council of Chief State School Officers
* National School Boards Association
National Association of State Boards of Education
American Personnel and Guidance Association

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*Not able to be interviewed

Educational Practitioner Organizations (continued)

National Education Association
* American Vocational Association
American Council on the Teaching of Foreign Languages
National Science Teachers Association
National Council for the Social Studies
American Alliance for Health, P.E., and Recreation
National Council of Teachers of English
* National Business Education Association
National Art Education Association
Council for Exceptional Children

State Coordinators

Arizona
California
Colorado
* Florida
Illinois
Massachusetts
Michigan
Missouri
New Jersey
New York
* Ohio
Pennsylvania
Tennessee
Texas
Washington
Wisconsin

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*Not able to be interviewed

APPENDIX B

Detailed Analysis of State Plans for State-Level Activities

State Administration

Employing additional SEA personnel for PL 95-207 program administration and coordination. Few states indicated that they planned to use PL 95-207 funds for employing additional SEA personnel, even though they were allowed to reserve up to 10% of their FY79 money and 5% of their FY80 for that purpose. States that addressed this area often did so within their plan's budget section (e.g., Georgia, Texas, Idaho), rather than treating it as a specific activity.

Reviewing and revising the state career education plan. About two-thirds of the states included only a brief reference to this type of activity, indicating that the review of plans would be conducted annually by the State Career Education Coordinator and State Advisory Council. Other states provided a more detailed description of their strategies (e.g., Alabama, Kansas, District of Columbia, Utah, and the Virgin Islands). The mechanisms mentioned for revising the state plans included the design and distribution of a survey instrument to state and local practitioners to solicit suggestions for revisions, using results of on-going evaluations based on the criteria within the state plan, and conducting workshops or inservice training to rewrite plans.

State Leadership

Conducting inservice training for educational personnel. All of the state plans included some mention of inservice training for educational personnel at the IEA and/or LEA levels. Those states for which inservice appeared to be a major implementation component included Georgia, Hawaii, Kentucky, Maine, New Hampshire, and South Carolina. States differed widely in the specific state-level inservice activities planned. Some states (e.g., Georgia, Ohio, California, Florida, Wisconsin, Maine) planned regional workshops, conferences and services, while others planned to concentrate their efforts at the local level. Some planned to conduct awareness workshops aimed at creating understanding of and commitment to career education (e.g., Vermont, Oklahoma, Hawaii). Others planned workshops aimed at developing or improving competencies for planning, implementing, and evaluating career education (e.g., Vermont, Rhode Island, Colorado, Nebraska). Several planned to address their inservice resources to special needs groups (e.g., Oklahoma, Idaho, Arkansas) or the counselor's role in career education (e.g., Montana, Idaho, North Carolina, Wisconsin). A major emphasis in many states' plans for inservice training was to reduce or eliminate race and sex stereotyping in career resources and practices, although few indicated exactly how this was going to be done.

Training local career education coordinators. Only about one-fourth of the states planned to provide state career education leadership through the training of local career education coordinators. Those states that did intend to devote some effort in this area (e.g., Kentucky, New Hampshire, Alabama) planned to train career education coordinators to serve as a catalyst in local or district-wide implementation efforts. The small proportion of states planning activity in this area may indicate either that many states do not anticipate utilizing local coordinators, or that no training at the state level is contemplated for those individuals.

Collecting, evaluating, and disseminating career education materials. Nearly all of the states planned to devote at least some effort to collecting, evaluating and disseminating career education materials. Among the specific activities planned were: developing communication networks for the collection and dissemination of career education materials and information about practices; establishing information exchanges with LEAs and regional offices through use of newsletters; identifying and listing sources of career education curriculum materials; collecting materials through the use of nationwide resources such as Educational Resource Information Centers and the National Center for Career Education; and identification of JDRP or state-validated projects and exemplary models for replication or adoption/adaptation. In many of the states, major emphasis was placed on guidelines aimed at overcoming sex bias and stereotyping.

The magnitude of effort in this area varied markedly among the states; for some states (e.g., Hawaii, Idaho, Kentucky, Missouri, New Hampshire, South Carolina) the development, evaluation, and dissemination of materials represented between a quarter and a half of their planned efforts, while in other states these activities were only a small part of larger efforts.

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Conducting statewide needs assessments and evaluation studies. Nearly all of the states planned to conduct some statewide needs assessments and/or evaluations. The states for which these activities appeared to be especially important included Missouri, Texas, Georgia, Kentucky, and Arkansas. Among the specific activities planned were: conducting formal surveys of existing career education programs in LEAs; preparing information booklets containing processes, procedures and sample instruments; and conducting workshops to familiarize LEA staff and community personnel with instruments and evaluation models capable of addressing unique characteristics of the districts. Some states planned to create guidelines for local-level evaluation feedback systems in which evaluation findings would be used to improve career education plans and programs. Also mentioned here were preparing annual reports of the extent to which outcomes and objectives of state plans have been attained, and submitting reports to OCE and/or state advisory committees for review and discussion.

Conducting statewide career education leadership conferences. Few states planned to conduct statewide career education leadership conferences, as such. Those states that did plan to devote some of their PL 95-207 funds to efforts in this area included the District of Columbia, Florida, Oklahoma and West Virginia.

Engaging in collaborative relationships. Nearly all of the states planned to engage in or promote collaborative relationships with state and/or local level groups to at least some extent. In a few states (e.g., Hawaii, Kentucky, Missouri, Wisconsin, Pennsylvania, and Guam), this area appeared to be the cornerstone of the state plan, accounting for between a quarter and a half of the planned activities. Involving the local business-industry-labor community was mentioned most often. This included providing resource persons in the school, hosting field trips, and providing exploratory work experiences. Several states also planned to see that other state educational agencies, as well as state-level business, industry, labor, and civic groups, were actively involved in planning for and implementing the career education program. Activities aimed at increasing the involvement of parents, local community, and special needs groups were also mentioned, although less often.

Promoting career education adaptation in the teacher training curriculum of higher education institutions. Only about half of the states planned some type of activity for promoting the incorporation of career education concepts in teacher training curricula of higher education institutions. In most cases, the states planned to develop and offer pre and inservice courses in colleges and universities. The states planning the greatest amount of effort in this area were Missouri and Pennsylvania.

Other activities. A number of other state-level leadership activities were planned that did not fit neatly into the above categories. Encouraging or assisting LEA involvement in career education is one such area. Included were: numerous activities related to the establishment of state guidelines fostering the growth and implementation of career education plans at the local level; consultative assistance to LEAs; career guidance program development and implementation; and appointment of LEA and IEA coordinators. The major emphasis, however, was on providing technical assistance by SEA staff. "Other" also included activities such as acquainting legislatures with the career education process to achieve support and recognition in mandating funding and providing support for and development of statewide occupational information systems.

APPENDIX C

Fiscal Year 1979 Awards to States, D.C., and Puerto Rico
Career Education State Allotment Program
under Public Law 95-207

State	Amount of Award	State	Amount of Award
California	$1,682,038	Mississippi	212,170
New York	1,389,694	Colorado	210,865
Texas	1,058,241	Oklahoma:	
Illinois	907,341	public	210,313
Pennsylvania	906,038	private	5,767
Ohio	873,447	Arizona	189,030
Michigan	777,628	Oregon	182,185
Florida	599,028	Kansas	178,274
New Jersey	581,755	Arkansas	171,756
Massachusetts	456,278	West Virginia	143,728
North Carolina	444,220	Nebraska	125,889
Indiana	443,567	Utah	125,806
Georgia	422,710	Maine	125,636
Virginia	408,695	Rhode Island	125,522
Wisconsin	388,162	Hawaii	125,518
Missouri	377,407	Idaho	125,513
Louisiana	348,726	New Hampshire	125,497
Maryland	340,905	Montana	125,455
Tennessee	339,601	South Dakota	125,406
Minnesota	333,735	North Dakota	125,388
Alabama	305,706	Nevada	125,369
Puerto Rico	304,729	District of Columbia	125,358
Washington	292,344	Delaware	125,341
Kentucky	281,914	Vermont	125,288
Connecticut	245,412	Alaska	125,276
South Carolina	244,434	Wyoming	125,237
Iowa	234,658		
		TOTAL	$18,500,000

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Fiscal Year 1979 Awards to Insular Areas
Career Education State Allotment Program
under Public Law 95-207

Insular Area	Amount of Award
Trust Territory of the Pacific Islands	$ 66,207
Guam	62,009
Virgin Islands	39,781
American Samoa	23,374
Northern Mariana Islands	8,629
TOTAL	$200,000

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NOTES: [1] The State of New Mexico elected not to participate in the Career Education State Allotment Program.

[2] Total participation in the FY 1979 Career Education State Allotment Program involves 49 States, D.C., Puerto Rico, and the 5 insular areas.

APPENDIX D

State Level Leadership Activities:

Notable Examples

Note: The following activity descriptions are based on materials collected during evaluability assessment site visits to ten states. They are included to provide readers of this report with a more realistic picture of the types of state-level leadership activities that are currently underway under full, partial, or anticipated PL 95-207 funding.

Readers should not infer that the activities chosen for inclusion have been evaluated by or are otherwise endorsed by AIR or the Office of Career Education. They are intended to be illustrative only.

2/28/80

STATE LEVEL ACTIVITY DESCRIPTION - STAFF DEVELOPMENT

California Master Trainer Program

Background

The Master Trainer program is now in its fifth year of operation in California. It represents a comprehensive state-supported mechanism for utilizing experienced personnel to train other educators as "master trainers"--inservice staff development experts who specialize in identifying and infusing community resources into the curriculum. The master trainers, many of whom are also members of the California Association of Work Experience Educators (CAWEE), are first trained by experienced SEA personnel in career education concepts; they then conduct LEA-level staff development workshops and provide resources and technical assistance with the goal of establishing ongoing inservice training for all staff in the LEA. Thus the program contains three distinct levels: a small state-level staff trains and assists master trainers, who in turn train and assist LEA level staffs, who in turn train and assist local teachers, counselors, administrators, and community members.

During 1974-75, its first year of operation, the Master Trainer program trained 17 CAWEE master trainers, who then trained over 150 LEA-level staff to conduct career education staff development. In 1975-76, 40 CAWEE master trainers and over 400 local and county level trainers were reached. That year marked the first year in which specialized audiovisual and other support materials for the program were developed. In 1976-77, 400 additional district level staff were trained, and the model was extended to include other groups of educators besides CAWEE, including pupil personnel services groups, English and math councils, and regional and county offices of education.

In 1977-78, a PL 93-380 USOE career education grant and support from VEA subpart 3 allowed SEA staff to develop and disseminate a Training Kit, which contains numerous career education staff development resources. The kits were designed to be given to each LEA that participates in a Master Trainer program workshop.

In 1978-79, two special sessions were held initially to retrain previously trained master trainers to use the new training kit, including the audiovisual and other support materials. Then, numerous training sessions were held throughout the state to train local staff in the use of the kit and the other resources. At each session, at least one kit was left at each training site for participants' subsequent use. Over 200 kits have been distributed. In addition, a thorough evaluation of the program was initiated.

SEA staff also determined that the format of the local session should be modified to provide an initial one day planning meeting, then two days of actual workshops, and finally a delayed one day followed-up designed to provide assistance in implementing the district staff development program planned at the workshop.

During the current school year, primary attention has been devoted to districts participating in California's massive (over $123 million in 1978-79) School Improvement Program (SIP), a state-funded program designed to increase local-level planning and participation in school improvement activities, especially at the elementary level.

Nature of the Program

The original goals of the program were as follows:

- to identify individuals who have the interests and abilities necessary to serve as career education master trainers;
- to acquaint the selected master trainers with the career education concept and provide them with the experiences and skills needed to conduct local level inservice training;
- to identify master trainer teams and then arrange for them to plan and carry out career education training sessions in selected school districts, institutions, and other groups, including professional associations; and
- to prepare and disseminate training resources that will facilitate the staff development process.

The workshops involve 25-35 teachers, counselors, and administrators, along with selected students and community persons. One day is devoted to planning with district and school decision-makers. About four weeks later, two days of concentrated training (7 to 8 hours per day) are conducted. Topics include definition, goal setting, infusion into instruction and guidance, community resource management systems, and optional components. The training is process oriented and is paced according to the district's readiness and the trainees' capabilities to move through each component.

At the completion of the training, the district has a prioritized set of career education goals, units and activities written for each participant, a set of action plans, and a set of resources for implementing the plans. In six to 12 weeks, the team returns to the district to evaluate the training and review work on units and the action plans.

Any district may apply for a Master Trainer workshop, and several regional teams of trainers have been set up to respond to these requests. A training team usually consists of one state consultant and two or three master trainers, depending upon the size of the group to be trained. Nearly every discipline and specialty area is covered on the roster of available trainers. The range goes from a kindergarten-first grade teacher to an assistant vice president of one of California's leading banks, including a sizeable number of community college personnel.

Before it applies, an LEA should be prepared to commit up to 10 staff people for one day, including classroom teachers, for planning the training sessions with the master trainer team; be willing to release 20 to 30 people full time for two days for the training session; and be able to release at least ten people six to 12 weeks later for the evaluation and follow-up session.

The only costs the LEA is expected to assume are the costs of substitutes to release classroom teachers to participate and the cost of renting a facility if a site away from school-owned property is desired.

The Master Trainer program pays for the travel and per diem of the training team and all the materials necessary to conduct the initial training session, including the training kit, which contains most of the materials and media needed for the local group to conduct subsequent training sessions. For the 1979-80 school year, the program is partially supported by PL 95-207 state administration funds, which pay the salary of the program coordinator. The bulk of the funds is provided by the ESEA Title IVC and VEA subpart 3.

Key Elements

Based on their experience in developing and conducting this type of state level activity, California SEA staff members consider the following elements to be crucial:

- prior administrative commitment by the LEA or agency whose staff is to be trained; the LEA must request the training and complete a written agreement to provide the necessary resources;
- use highly experienced trainers, and select trainers who can communicate directly to the LEA staff being trained in language they will understand;
- give the participants resources they can use after the workshop, and make sure they are given actual supervised experience in using the resources;
- provide participants an opportunity to write an implementation plan for use in their own settings, with time, tasks, and responsibilities identified;

- follow-up with a later support session to see how implementation is progressing (how well their own staff development efforts have succeeded), identify barriers, and provide technical assistance in eliminating them;

- attempt to set up a continuing support network of former participants to allow them to share experiences and insights, provide them with continuing assistance (e.g., make them aware of available resources and supply them if possible), possibly through a newsletter; and

- formally involve the business, industry, labor community in planning and conducting the workshops whenever existing collaboration mechanisms make it possible.

For Further Information

For further information, contact:

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3/26/80

STATE LEVEL ACTIVITY DESCRIPTION - PRESERVICE TEACHER TRAINING

Arizona Assistance to Higher Education Institution Under PL 95-207

Background

In the state of Arizona, as well as across the nation, only very minimal efforts have been made to incorporate Career Education into the preservice preparation of teachers. Legislation authorizing funding support for local and/or regional Career Education projects in Arizona specifically prohibits expenditures of these funds for preservice, implying that preservice teacher education is the responsibility of the universities through the Board of Regents and should be funded through their budgets.

As with other shifts in program emphasis, an effort to infuse Career Education into the on-going preservice teacher training program involves significant start-up costs, especially for the acquisition and development of new instructional materials and resources. With declining enrollments in teacher education, the Board of Regents has been understandably hesitant to place diminishing funds behind the development of new programs.

Yet if career education is ever to become to truly institutionalized in American education, its concept must be taught at the preservice level. Extensive inservice training is costly, fragmented, and effective only with teachers who are open to change. Training teachers at the preservice stage is the most efficient method of ensuring teacher receptivity, continually reinforcing career education concepts and approaches throughout training, and hastening the "mainstreaming" of career education throughout the educational system.

By late 1979, faculty members at Arizona State University (ASU) College of Education had already made a few efforts in this direction. Encouraged by the Dean of the College, they had worked with the Arizona Department of Education to offer training courses on career education concepts to faculty involved in preservice teacher education. Both the College and the Dept. staffs realized that for career education concepts to be successfully incorporated into preservice instructional programs, instructional materials and resources were needed that could be integrated into the curriculum planning and teaching methodology experiences of prospective teachers. Such materials should relate to all areas of the curriculum and should be realistic in terms of programs materials already in existence in schools.

Nature of the Program

Recognizing this need, the Arizona Department of Education decided to award a portion of its PL 95-207 leadership funds to the ASU College of Education. In October of 1979, a grant of $16,490 was made to the College for the awarding of mini-grants to interested faculty members for development of career education material. Staff of the project included a supervisory faculty member and a half-time graduate assistant, responsible for identifying target areas, stimulating interest among faculty members, and giving editorial assistance in materials development.

The original intent of the mini-grant program was to encourage faculty initiative in selection of materials topics; but the project staff soon realized that a more coordinated and comprehensive set of materials would result if the staff took the initiative. Accordingly, the staff made several basic decisions about the materials: (1) the curriculum areas and basic activities would be selected by the staff; (2) the materials would be modularized and consist of videotapes plus written activities; (3) the modules would be suitable for individualized instruction; and (4) the videotapes would be produced at local school sites that had active career education programs with especially interesting activities in the selected curriculum areas.

Faculty in teaching methods and curriculum planning courses at different grade levels were consulted for guidance on the types of activities that would be most useful to them and their students. Eight modules are currently under development in major curriculum areas (for example, elementary social studies and elementary language arts). Field testing and evaluation are planned as modules are completed.

Key Elements

None of the modules is yet completed, but the project staff is pleased with progress so far. Key elements of the process appear to be:

- placing overall responsibility for module initiation development in the hands of one staff;
- covering all major curricular areas and grade levels with a comprehensive set of module topics;
- obtaining input from the faculty as to their needs and the needs of their students; and
- selecting exciting classroom activities for videotaping to "hook" viewers into an interest in career education.

For Further Information

For further information, contact:

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3/24/80

STATE LEVEL ACTIVITY DESCRIPTION —

STATE LEADERSHIP CONFERENCE (LARGE STATE)

Florida Annual Career Education Conference

Background

Florida's career education conference planned for spring 1980 will be the ninth annual statewide conference. Over the last eight years the programs have included a wide range of presentations--including use of nationally recognized leaders in career education as keynote speakers. Members of advisory councils have shared the stage with state staff and school board members. The sponsorship and funding for the conferences have been equally diverse. State and federal vocational education money, state Student Development Services and staff development funds, and federal and state career education money have all helped to support the conferences. Sponsorship has also been shared over the years, usually by the Florida Advisory Council on Career Education and the Department of Education.

Similarly, the range of topics covered since early 1970 has been wide. At the beginning, the major questions discussed revolved around what is career education and how can career education be carried out in the schools. As the years passed and the numbers of educators trained in career education grew, the conference themes changed to specific problems such as writing district plans, identifying sources of funding, and expanding career education to the postsecondary level.

Planning for the annual conferences has always been built on several bases: legislative changes (both state and federal); changes in funding sources and levels; and, most importantly, comments and suggestions from participants. SEA staff had final responsibility for the format and content of the conferences. Adding or deleting sessions for the state conference has also been a result of attendance at regional and national conferences. For example, the 1980 statewide conference will have a presentation on Career English, which will demonstrate the infusion of career education concepts into secondary language arts. Other rich sources of programming are the national conferences for state coordinators and the regional technical assistance workshops sponsored by USOE/OCE. The issue of stereotyping by sex, race, or handicap in career education materials and programs was raised as a major issue in 1979. This topic will be included in the program of the 1980 state conference.

Nature of the State Leadership Activity

The purposes of the conferences usually have been specific to the particular year's program. However, several goals have remained basically the same, although actual content may have changed. These goals are to:

1. provide opportunities for practitioners to hear from state and national leaders in career, vocational, and basic education;
2. update participants on legislative mandates, interpretations of rules and regulations, and sources of funding;
3. provide opportunities for district and local people to share information and materials;
4. exhibit new commercial material related to career education;
5. transmit information about recent research on career education evaluations, models, and testing;
6. increase understanding and strengthen relationships between career educators and business, industry, advisory groups; and
7. present information about exemplary programs in career education at all levels, K-postsecondary.

All local, district and state career education coordinators and regional division consultants are invited to attend. In addition, all members of advisory councils, teachers, occupational specialists, administrators, and counselors from elementary through community colleges are encouraged to attend. Directors and staff of programs such as Community-Based and Experience-Based Career Education usually participate, as do those individuals interested in the special topics of the pre-conference sessions.

In 1980, a pre-conference to be held during the first half-day of the three-day conference will focus on career education in Florida's postsecondary system. Presentations will be made by directors of exemplary programs at community and junior colleges, state universities, and area vocational centers. Each of the three conference days features a keynote speaker, Dr. Marland, Dr. Hoyt, and the Executive Editor of Career World--Joyce L. Kennedy. In the past, the format of major addresses and panel discussions did not always allow participants to attend every session of interest to them. The 1980 plans, therefore, provide a repeated series of minisessions for the entire second day of the conference. Although difficult for the presenters, this solution may be the answer when conference attendees are faced with the dilemma of choosing among equally interesting topics.

Two of the minisessions this year deal with equity. One is specifically a how-to lesson on implementing a sex equity workshop, and participants will be trained to use the methods, materials, and information in their own district inservice programs.

The second presentation--Strategies to Eliminate Stereotyping by Sex, Race and Handicap in Career Choice--will repeat for state people what had been provided by AIR for SEA Career Education Coordinators at a recent OCE-sponsored national conference. Under a contract with the Office of Career Education, AIR reviewed and identified exemplary career education programs and activities that combat sex, race and handicap stereotyping. Program manuals for classroom teachers were prepared describing the programs and activities. As part of a task to provide technical assistance to states, the manuals and their use will be discussed at Florida's 1980 state Career Education Conference. Copies of the manuals will be provided to participants, who will be asked to evaluate the presentation and materials.

One of the major presentations at the 1980 conference will be conducted by the Florida SEA's Center for Career Development Services (CCDS). It has successfully participated in previous annual conferences as well as in other workshops and conferences across Florida. For the last decade, this Center has taken statewide leadership in collecting, evaluating, adapting, adopting, producing, and disseminating materials in the career development and career education field. In recent years, the creativity the Center has used in producing and disseminating its materials has increased markedly, as has the receptivity of its audience. Professional public relations and advertising techniques expected in private enterprise but seldom used by public educational agencies have stimulated this increased receptivity.

One of the Center's first products was the Florida VIEW system. Initiated in 1970, this system provides job and training site information on 577 jobs as well as information on every public and private postsecondary education and training institution in Florida. Since then, the Center has expanded its product line in ways such as the following: a newsletter. CCDS Developments, highlighting its materials and services; a film (i.e., Florida Apprenticeships: Training for the Future); a tabloid-formatted Career and Educational Planning Guide, describing Florida's postsecondary education and training programs; posters, designed to serve as career development stimulators (e.g., "It's a Jungle Out There" and the 1980 Rat Race Calendar with the accompanying message beginning: "How do your tomorrows look? The future can be an exciting place...if you are prepared. We can help."); a toll-free hotline that the public can call for career information; CAPS, a Computer-Assisted Placement Service; CHOICES, an adaptation of a Canadian computerized career planning system; and booklets (such as the Career Book, a student-oriented guide to help counselors and occupational placement specialists assist clients to use Florida VIEW and to make career decisions wisely).

These are the types of products and services CCDS will be displaying and describing in the 1980 conference.

Evaluations of each annual conference have been important to state staff in their efforts to improve the quality of future conferences.

They are asked to comment on items such as the pace and content of the conference and to suggest topics for the next conference.

For the 1980 conference, travel costs for career education coordinators will be paid in part by PL 95-207 funds, under the 10% retained by the state for leadership activities.

Key Elements

For almost a decade, Florida has used the system of regional and state workshops and conferences to provide an efficient dissemination and evaluation mechanism. The following elements have helped to make the series of conferences successful:

- use a mix of experienced presenters (national, state, and local) to provide an overview of national policy, state agency assistance, and local experience for practitioners;
- build each conference on the evaluations of past conferences and the recommendations of practitioners;
- provide special workshop sessions on topics with current and immediate application;
- allow time for sharing activities and resources among practitioners involved in the daily conduct of career education;
- formally involve the community through advisory councils' sponsorship, planning, and participation;
- expand state horizons to include presentations from national and regional conferences;
- continue state support for participants through a regular newsletter and follow up local workshops;
- contract with qualified materials developers who have experience in producing creative products;
- help materials development team members conceptualize the desired content accurately, but give them latitude in presenting it creatively;
- give materials development team freedom to invent innovative formats for packaging the desired content; and
- work with materials development team to design a systematic and comprehensive plan for disseminating the materials on time, to the appropriate audience.

For Further Information

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STATE LEVEL ACTIVITY DESCRIPTION--STATE LEADERSHIP CONFERENCE (SMALL STATE)

Vermont Career Education Mini-Conference

The Vermont Career Education Mini-Conference was held November 15-16, 1979, with approximately $2500 in PL 95-207 funds. Modeled on OCE's recent mini-conferences, it was designed to allow non-education agencies with career-related programs to share information about their activities.

The Vermont Career Education staff felt that many non-education agencies and organizations were making strong efforts to provide activities and resources to enhance the career development of young people, but that mutual knowledge and coordination of such efforts was lacking. The purpose of the mini-conference was to acquaint these organizations with one another's activities and with current and future activities planned by state and local education agencies. In addition, the conference allowed observers from Vermont educational institutions to learn about the many organized community resources available in the state. Finally, conference activities formed a basis for planning of 1980-81 collaboration among organizations.

Invited conference participants represented state chapters of the following national groups:

- Vermont Federation of Women's Clubs
- National Alliance of Business
- Future Farmers of America
- Community Education Work Council
- Agency of Development and Community Affairs
- New England Telephone
- Vermont AFL/CIO
- American Legion Auxiliary
- Green Mountain Council, Boy Scouts of America
- National Federation of Business and Professional Women's Clubs
- U.S. Department of Labor (Apprenticeship Programs)
- Vermont Girl Scout Council
- 4-H
- Chamber of Commerce

In addition to the 14 participants, 18 observers attended the conference, mainly representatives of state and local educational agencies. Participants' expenses were paid through PL 95-207 state leadership funds (observers' expenses were not covered).

The conference agenda covered the following topics:

- overview of career education
- identification of issues for Vermont
- reports of activities of participant organizations
- discussion of selected issues
- planning for collaboration efforts 1980-81

Excerpts from the OCE Career Education Monographs on each national organization and the Vermont State Plan for Career Education were used as a framework for identification of issues in Vermont and later for development of collaboration plans.

Each participant then made a presentation about his/her organization's efforts in support of career-related activities. These efforts ranged from the formal, intensive Career Guidance Institutes conducted by the National Alliance of Business with CETA sponsorship, to work experience (CETA- and non-CETA-funded), to financial support for students, to promotion of new industry and career opportunities in Vermont.

Planning for 1980-81 centered around ways of implementing the organizational roles described in the OCE monographs at the state and local chapter level for each national organization. Participants reached consensus that efforts toward such implementation should constitute the first step in an ongoing planning process, and that no separate planning document was required at this stage. They also made individual plans for coordination of organizational resources.

For Further Information

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STATE LEVEL ACTIVITY DESCRIPTION--COLLABORATION

Colorado Communities for Business and Education Interaction

Background

One of the major areas supported by the Colorado State Office of Career Education is the promotion and expansion of collaboration between the business community and education. The process began in 1975 when 70 people, mostly educators involved or interested in career education, held a statewide conference to examine what could be done to assist young people in getting into the mainstream of the American enterprise system. The process continued in 1976, when a national conference at Vail attracted 350 people, again mostly educators.

In 1977, at the Camp LaForet Conference Center near Colorado Springs, the structure of Colorado Communities for Business and Education Interaction began to take shape. Here, essentially for the first time, business people and educators began to wrestle with how to make career and economic education a viable part of the educational process in Colorado. The Camp LaForet Conference marked the first major involvement of business, industry, educators, chambers of commerce and private citizens in the effort to develop educational programs that had relevance to the real world of work.

As a result of the conference, the Colorado Association of Commerce & Industry (CACI) (a state-level chamber of commerce), through its Project Confidence division, linked up with the Career Education Department of the Colorado Department of Education and with Colorado State University. Their first step was formation of the Colorado Communities for Business and Education Interaction as a statewide coordinating organization. Its role is to bring local education and business leaders together in workshops modelled after the original Camp LaForet Conference: the leaders set goals and develop joint action plans for their own communities. When they return home, they enlist support from other business persons and educators to set up local business-education councils. CACI and the Department of Education offer continuing support, to be described subsequently.

Nature of the Program

A major component of the program is the statewide workshops. Trained facilitators work with community teams composed of local chamber of commerce and school district members to help them set goals and plan for specific community-education activities. The facilitators are often members of the Colorado chapter of the American Society of Training and Development.

In December 1977, eight business and education leaders from each of eleven communities participated in a three-day leadership workshop. The objectives of the workshop were to identify strategies to increase communication between business and education. Results included the drafting of short- and long-range plans for each community to follow in building its network for greater participation and cooperation. Some of the plans involved actions to:

- obtain funding for career/economic education in the schools;
- establish business/teacher shadowing programs;
- develop activity packages for use by students in hands-on experiences related to occupational areas; and
- create a resource speakers bureau of business people.

Two more three-day leadership workshops were held in April 1978 with additional communities represented by four educators and four business leaders from each. In all, 34 communities have been trained and have established councils to maintain cooperative efforts between schools and communities. Over the next two years the remaining 90 districts in the state will be helped to set up and train similar task forces.

An additional role of Colorado Communities for Business and Education Interaction is to help individual communities mobilize resources, to help them develop plans for the efficient allocation of those resources, and to provide a broader opportunity for business and education to work together. As part of this continuing effort, FY1979 PL 95-207 funds have been made available to the 34 communities. Each may apply for a grant of $1,500 to carry out slightly different activities that respond to individual community needs. Four communities in Jefferson County, Colorado, have established councils and received $1,500 grants. Brief descriptions of how two of these communities are using their funds follow.

The Business-Education Council of Arvada, Colorado, will use its money to sponsor a series of lunches for people from the community. Each lunch will involve people from a particular career cluster. At these lunches staff will develop plans for two pilot activities. The first is a mini career faire for students, where the employers from the various career clusters will explain jobs and career opportunities. Second, they will develop plans for a seminar series also structured around career cluster areas. The Arvada Council hopes to test out these two ideas in a small way and observe the community's response.

The Business-Education Council of Wheat Ridge, Colorado, will conduct a needs assessment of the community to see which career clusters are represented in the community and what jobs are available. The survey will also determine if local businesses would be willing to have students visit or be involved in brief internships. Staff will then publish a small booklet describing their findings. They are hoping this booklet will make youth aware of the many opportunities in Wheat Ridge and help to keep some youth in the local area rather than going to Denver to find jobs. They will also sponsor a series of breakfast meetings for community representatives where future cooperative efforts can be developed.

Key Elements

Several factors at both the state and local levels have helped the collaboration between business and education to work at the state level. These are:

- Both state organizations (CACI and the Department of Education Career Education Office) directly involved themselves in planning and supporting the continuing activities.
- Professional facilitators, experienced in organizational development (members of the American Society of Training and Development) assisted local community task forces in setting attainable goals and helped establish the communication between educators and business leaders.
- Goals and objectives from the workshops have been built into the system by becoming part of the local chambers of commerce and the local school districts' goals.
- Collaboration was further enhanced by the appointment of the CACI chairperson as the head of the State Career Education Advisory Committee.
- Weaknesses identified by business and education were acted upon--career education was added to curriculum for guidance counselor programs at the state universities.
- Business people (from CACI) as well as SEA staff reviewed proposals to fund business/education councils, another mechanism for collaboration.

Elements which have contributed to the success of the Business-Education Councils such as those in Jefferson County include:

- They have built on personal contacts. One of the best ways to establish these personal contacts is for school personnel involved with the council to join the local Chamber of Commerce.
- The first meetings of the council have been held away from the school setting. Business people have seemed to be more comfortable in their own setting.
- School people have had to allay fears that many strings would be attached if the councils accepted $1,500 in federal money. As a part of this, school personnel have written the grant applications and have volunteered to do the record keeping and paper work.

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APPENDIX E

Actors, Activities, Outcomes, Measures, and Data Sources: The PL 95-207 Measurement Models

The tables that follow are arranged by the major actor groups contained in the functional PL 95-207 program models in Figures 4, 5, and 6.

They include only those activity → outcome linkages judged by OCE program managers to be less critical to the implementation of PL 95-207. Those judged to be most critical were included in Table 6, which should be reviewed before this Appendix is used.

Actor: Office of Career Education (OCE)

Activity	Intended Outcome	Measures	Data Source
1. Establish formal working relationships with national BLIP, CC, and educational groups	National BLIP, CC, and educational groups provide support for career education and assistance in implementing it at state/local levels	1. Number of miniconferences conducted for BLIP, CC, and educational organizations	1. OCE miniconference records
		2. Number of monographs published outlining roles of BLIP, CC, and educational organizations	2. OCE publications file
		3. Number of contracts for planning or development awarded to BLIP, CC, or educational organizations	3. OCE contracts file
		4. Number of contracts involving collaboration with BLIP or CC organizations awarded by OCE	4. Same as 3
2. Prepare and disseminate materials on career education and possible roles of major participants	Major actors at national, state, and local levels understand and attempt to carry out roles in implementing career education	1. Number of papers or monographs published covering roles of major actors at national, state, and local levels	1. OCE files of publications
		2. Number of speeches given to BLIP, CC, or educational organizations covering role(s) in career education implementation	2. OCE records of speeches
		3. Comprehensiveness of papers or monographs	3. Review papers and monographs

(continued)

Actor: OCE (continued)

Activity	Intended Outcome	Measures	Data Source
3. Conduct miniconferences	Facilitate national dialogue on career education among major national and state organizations and local educators; promote understanding of career education concept and roles of major actors	1. Number of miniconferences held	1. OCE records
		2. Number and size of groups involved	2. Same as 1
		3. Number of monographs published summarizing discussions	3. Same as 1
		4. Extent of distribution of monographs (number disseminated, to whom)	4. Same as 1
		5. Extent to which miniconference agendas are met	5. Minutes for miniconference sessions
		6. Extent of dialogue at conference as reflected by relative proportion of remarks made by each participant	6. Same as 5
		7. Expressions of utility or value of sessions made by participants following meeting	7. OCE correspondence files; survey of participants
		8. Reports of actions taken by participants as a result of meeting	8. Same as 7
4. Sponsoring special projects (demonstrations, technical assistance)	Develop or enhance skills and capabilities of major actors to facilitate implementation of career education	1. Number and types of projects funded	1. OCE contract files
		2. Extent of relationships between projects' goals and CE/PL95-207 goals	2. Review of projects' proposals/final reports
		3. Nature and extent of dissemination	3. OCE files

(continued)

Actor: OCE (continued)

Activity	Intended Outcome	Measures	Data Source
4. (continued)		4. Reported utilization of projects' results, products	4. OCE correspondence; survey of recipients/ participants
5. Collect and disseminate data on the effectiveness of career education	Elicit support for CE from Congress, major actors, and general community	1. Contracts awarded for collection of evaluation data	1. OCE contract records
		2. Provision for the reporting of evaluative data in other OCE grants/ contracts	2. Review OCE grants/ contracts
		3. Number of papers/reports/speeches summarizing available evaluation results	3. OCE files
		4. Number of miniconferences or other sessions conducted on evaluation in CE	4. Same as 3
		5. Extent of dissemination of results	5. Document distribution lists; records of attendees at conferences where speeches are given
6. Allocate funds appropriated by Congress to states and territories	States/territories receive funds to assist them in implementing career education	1. States are notified of availability of funds and procedures for applying	1. OCE files
		2. Funds are allocated within a reasonable time after receipt of applications	3. Same as 1

(continued)

Actor: OCE (continued)

Activity	Intended Outcome	Measures	Data Source
6. (continued)		3. Funds are allocated within a reasonable time after receipt by OCE	3. Same as 1
		4. All funds to be allocated are committed prior to end of fiscal year	4. Same as 1
7. Review and analyze state plans and annual evaluation reports	Provide feedback to states on appropriateness/adequacy of plans or activities; provide partial basis for funding decisions	1. All state plans/evaluation reports are reviewed	1. Evidence of review in OCE files; reports of OCE staff
		2. Scope of review, from cursory to comprehensive	2. Same as 1
		3. Feedback is provided to states	3. OCE files; state files; reports of OCE and state level staff
		4. Feedback is constructive, suggesting how to improve plans/reports (where appropriate)	4. Same as 3
		5. Quality of plans, reports is considered in allocating funds	5. OCE records; reports by OCE staff
8. Reporting to Congress	Provide feedback on PL95-207 implementation and effects, as a basis for continued appropriations under the Act	1. Number of reports submitted to Congress	1. OCE records; reports of Congressional hearings
		2. Number of times OCE staff testify before Congress	2. Same as 1

(continued)

Actor: OCE (continued)

Activity	Intended Outcome	Measures	Data Source
8. (continued)		3. Extent of informal feedback to Congress (e.g., copies of reports sent to committee members, personal communications) 4. Evidence of support from members of Congress	3. OCE records; reports by OCE staff 4. Reports of Congressional hearings, committee reports

Actor: National Advisory Council on Career Education (NACCE)

Activity	Intended Outcome	Measures	Data Source
1. Commissions research studies and syntheses	Provide or obtain data for use in developing recommendations for legislation and policy	1. Number of studies commissioned	1. NACCE/OE records (RFPs, contract records)
		2. Stated relevance of study objectives to identified legislative/policy issues	2. Review of RFPs
		3. Extent to which study findings address legislative/policy issues	3. Review of study reports
		4. Extent study findings are utilized in developing recommendations for legislation/policy	4. Review of NACCE policy statements; report by NACCE members

Actor: National Business/Labor/Industry/Professional (BLIP) and Civic/Community (CC) Groups

Activity	Intended Outcome	Measures	Data Source
1. Develop guidelines for how members can be involved in CE	State and local chapters receive and follow guidelines	1. Number of organizations developing guidelines	1. Examination of records of national group, report of staff
		2. Specificity of guidelines	2. Examine guidelines
		3. Distribution of guidelines	3. Examination of records of national group, report by staff
		4. Extent guidelines are acted upon	4. Examination of files; observations; report of staff (critical incidents)
		5. Perceived feasibility/utility of guidelines	5. Report of state/local level people
		6. Size/scope of audience	6. Organizational mailing lists, records
2. Provide funds or other resources in support of CE	Facilitate implementation of (specific) CE activities at state/local levels, especially activities involving BLIP and CC groups	1. Magnitude of funds/resources provided	1. Organizations' records
		2. Number and type of organizations providing funds	2. Same as 1; report of staff
		3. Types of nonmonetary resources provided (e.g., personnel, facilities, materials)	3. Same as 1

(continued)

Actor: National BLIP and CC Groups (continued)

Activity	Intended Outcome	Measures	Data Source
2. (continued)		4. Type of activities carried out with resources provided 5. Scope of activities carried out (e.g., number of IEAs, SEAs, others involved, extent of multiplier effect)	4. Same as 1; reports of recipients 5. Reports of recipients; recipients' records

Actor: National Education Organizations

Activity	Intended Outcome	Measures	Data Source
1. Participate in national career education projects	Increased commitment to CE and CE activity at state and local levels	1. Number and type of organizations involved	1. OCE records/contract files; organizations' files
		2. Type of projects (planning, materials development, teacher training, etc.)	2. Same as 1
		3. Extent projects involve individual members	3. Organizations' files
		4. Number of members involved	4. Same as 3
		5. Number of local CE activities resulting from projects	5. Organizations' records (?); reports of organizations' staff and members
2. Conduct conferences on career education concepts and implementation strategies	Stimulate commitment to CE and CE activity among members	1. Number and type of organizations conducting conferences	1. Organizational records
		2. Number of individuals involved in conferences	2. Same as 1
		3. Extent conferences focus on concepts vs. strategies	3. Conference proceedings, agendas, records
		4. Specific activities initiated as a result of conference	4. Reports of individual members

Actor: State Career Education Coordinator (CEC) Leadership

Activity	Intended Outcome	Measures	Data Source
1. Train local CE coordinators	Local CECs develop knowledge and skills to encourage and aid LEA personnel to implement CE	1. Number of training sessions held	1. State records, annual report
		2. Number of local CECs trained	2. Same as 1
		3. Objectives/content focus of training	3. Training agenda, materials; observation; report by staff, participants
		4. Extent training covers each of 8 responsibilities	4. Same as 3
		5. Utilization of knowledge, skills learned	5. Examine participants' subsequent products; observe participants' subsequent work; report by participants
		6. Examples of what participants do differently as a result of training	6. Critical incidents from participants
2. Collect, evaluate, disseminate materials and resources	Provide materials for educators at local level to use in implementing CE in classrooms	1. Number of materials/resources identified for dissemination	1. State and/or responsible agency records
		2. Types of materials/resources disseminated (e.g., student vs. teacher materials; comprehensive programs vs. specific items)	2. Same as 1
		3. Extent materials are evaluated prior to dissemination (not at all, informal screening, formal assessment)	3. Same as 1; reports of staff

(continued)

Actor: State Career Education Coordinator (CEC) Leadership (continued)

Activity	Intended Outcome	Measures	Data Source
2. (continued)		4. Evaluation criteria applied: freedom from bias/stereotyping, evidence of effectiveness, other	4. Report of staff; examination of selection/evaluation procedures, guidelines
		5. How materials are disseminated	5. Record of state or responsible agency; report of staff
		6. Size, scope of target audience	6. Mailing lists for materials, announcements
		7. Extent of utilization of materials	7. Checkout records for centers; report by or observation of users; examination of user's instructional plans
3. Conduct statewide needs assessment and evaluation studies	Information on CE needs and priorities in state and extent of progress in meeting state objectives, to provide a basis for revision of state plan and efforts and for annual reports	1. Frequency of needs assessments	1. State records, annual report
		2. Focus on activities vs. learner outcomes	2. Examine document (survey)
		3. Extent of relationship between content and state plan objectives	3. Same as 2
		4. Size and composition of respondent group	4. Survey respondent/mailing list

(continued)

Actor: State Career Education Coordinator (CEC) Leadership (continued)

Activity	Intended Outcome	Measures	Data Source
3. (continued)		5. Extent to which resulting needs are addressed in state plan revisions	5. Examination of results and plan revisions
		6. Focus of evaluations on activities vs. learner outcomes	6. Examine instruments
		7. Size and composition of respondent group	7. State records, mailing lists
		8. Extent evaluation is objective vs. subjective	8. Examine instruments
		9. Extent evaluation results are included in annual reports and state plan revisions	9. Comparison of results to report, plan
		10. Extent results of needs assessment and evaluation are presented or translated into "actable" terms	10. Examination of reports of results
4. Conduct statewide leadership conferences	Participants' commitment to CE and its implementation increases	1. Number of conferences held	1. State records; annual report of state CEC
		2. Number of participants	2. Attendance roster
		3. Composition of audience(s) (number of "major actor" groups represented)	3. Same as 2
		4. Focus on general theory/concept vs. specific practice, applications	4. Conference agenda, materials; reports of speakers, participants

(continued)

Actor: State Career Education Coordinator (CEC) Leadership (continued)

Activity	Intended Outcome	Measures	Data Source
4. (continued)		5. What participants do differently as a result of conference 6. Resolutions or recommendations for state funding, legislation adopted 7. Extent resolutions cover (1) infusion, (2) collaboration, (3) comprehensive guidance and counseling, (4) elimination of bias/stereotyping	5. Critical incidents from participants 6. Conference proceedings 7. Same as 6
5. Promote adaptations of teacher training curricula in institutions of higher education (IHEs)	Establish CE as an integral component in teacher preservice training, so that teachers enter work force prepared to implement CE in the classroom	1. Nature/extent of CEC effort 2. Extent curricula modified to cover (1) infusion, (2) developing collaborative relationships, (3) implementing comprehensive career guidance and counseling programs, (4) elimination of bias/stereotyping	1. State records, annual report; reports by state, IHE staff 2. Examine program guides and curricula; critical incidents from IHE staff

Actor: State CEC (Administration)

Activity	Intended Outcome	Measures	Data Source
1. Employing or assigning necessary administrative personnel	Provide staff with sufficient skill and clout for efficient administration and strong leadership, in order to increase commitment to and investment in CE at state, regional, and local levels	1. Extent of state CEC's prior experience in CE	1. State CEC's resumé
		2. Level of state CEC position in state educational hierarchy	2. State education department organization chart
		3. Number of other individuals devoting ½ time or more to CE	3. State budget and position charts; report by state CEC
		4. Number of individuals with experience in bias/stereotyping	4. Staff resumés
		5. Number of individuals with professional training in guidance and counseling	5. Staff resumés
		6. Number of state education/training programs/SEA offices providing staff time for CE implementation (e.g., offices for special education, evaluation, youth employment, etc.)	6. State budgets and position charts; report by state CEC

(continued)

Actor: State CEC (Administration) (continued)

Activity	Intended Outcome	Measures	Data Source
2. Submit necessary assurances and plans to OCE	Receipt of federal funds under PL95-207 which will be used to implement CE statewide; plans may also serve as a vehicle by which BLIP and CC groups are involved in CE planning/implementation; task of preparing plans may serve to focus state's reports and result in more effective program	1. Assurances necessary for FY79 funding were submitted	1. OCE records
		2. State plan for FY79-80, to obtain FY80 funding, was submitted	2. Same as 1
		3. Extent state plan was considered acceptable by OCE, vs. requiring modifications	3. OCE records, correspondence; report by OCE staff
		4. State received maximum allowable funds for each FY	4. OCE records
		5. Extent of involvement of BLIP and CC groups in preparation of plan (none, advisory, contributor, co-preparer)	5. State plans; report by state CEC
3. Review and revise state plans	Modify state program as necessary during course of program to ensure that state needs and goals are met to the extent possible within funds available; receive continued funding under PL95-207	1. Frequency of review of state plan	1. State CEC records; report by staff
		2. Level of effort expended in review and revision	2. State budget; personnel time sheets; report by state CEC
		3. Number of individuals/groups involved in review	3. Same as 2
		4. Focus of review (e.g., budget timeline, activities, objectives)	4. Documents covering review procedures, recommendations resulting

(continued)

Actor: State CEC (Administration) (continued)

Activity	Intended Outcome	Measures	Data Source
3. (continued)		5. Number of modifications made	5. Examination of revised and original plans
		6. Where modifications were made (e.g., timeline, activities, objectives, budget)	6. Same as 5
		7. Nature of modifications made	7. Same as 5
		8. Extent modifications are based on objective/empirical data	8. Examine recommendations for plan revisions; report by CEC
4. Review proposals and allocate funds to IEAs, LEAs, and private, nonprofit educational organizations	Provide money to LEAs to encourage them to implement CE and to invest in CE	1. Number and type of BLIP and CC groups involved in review	1. State CEC records
		2. Extent of funding decisions' reliance on ratings of quality of proposal	2. Same as 1
		3. Who makes funding decisions (state CEC, state Advisory Council)	3. Same as 1
		4. Percentage of eligible schools awarded funds	4. Reports of how funds are allocated
		5. Percentage of schools in state awarded funds	5. Same as 4

(continued)

Actor: State CEC (Administration) (continued)

Activity	Intended Outcome	Measures	Data Source
4. (continued)		6. Percentage of state's private schools receiving funds 7. Percentage of funds awarded for guidance and counseling or for overcoming bias/stereotyping	6. Same as 4 7. Same as 4; proposal budgets

Actor: Institutions of Higher Education

Activity	Intended Outcome	Measures	Data Source
1. Conduct other leadership activities	Develop attitudes and skills among educators and/or BLIP and CC personnel necessary to bring about CE implementation	1. Number of IHEs having contracts to carry out leadership activities	1. IHE records; state records
		2. Extent leadership activities focus on (1) infusion, (2) collaboration, (3) guidance and counseling, (4) elimination of bias and stereotyping	2. IHE records
		3. Number of individuals reached directly, indirectly	3. Same as 2
		4. Number/percentage of participants mastering knowledge and skills	4. IHE assessments; special assessment
		5. Number/percentage of participants applying/using knowledge/skill	5. Observation; special assessment
		6. Extent materials developed are disseminated	6. IHE records, mailing lists
		7. Extent materials developed are used	7. Survey of users

Actor: State BLIP and CC groups

Activity	Intended Outcome	Measures	Data Source
1. Participate on state career education advisory councils	Ensure that state BLIP/CC groups support CE and are actively involved in its implementation	1. Number and types of organizations represented on councils	1. Council membership list
		2. Number of official advisory council positions filled by state BLIP and CC representatives	2. Same as 1
		3. Number of state-level BLIP and CC groups expressing interest in serving on council	3. State CEC records re establishment of council
2. Assist in developing, reviewing, and revising state plans	State CE plans reflect needs and input of, and are endorsed by, state BLIP and CC groups	1. Number and type of groups involved	1. State CEC records; plan; report of state CEC and groups; PL93-380 reports
		2. Extent of groups' involvement	2. Same as 1
		3. Number and types of groups endorsing plans	3. Plan itself; state CEC records; records of groups; reports of staff
3. Disseminate materials and resources to local chapters	Encourage commitment to CE and CE activity in local chapters	1. Number and type of organizations disseminating materials/resources	1. State organizations' records; reports of state, local staff
		2. Type(s) of materials/resources disseminated (e.g., student materials, teacher materials)	2. Examine materials

(continued)

Actor: State BLIP and CC groups (continued)

Activity	Intended Outcome	Measures	Data Source
3. (continued)		3. Source of materials (parent organization, developed on own, other)	3. Examine materials; organizations' records; reports of staff
		4. Number and type of dissemination strategies (e.g., mass mailing, write for)	4. Organization records; report of staff
		5. Size/scope of audience reached	5. Organizations' mailing lists, records
		6. Extent of use of materials	6. Records of local chapters; reports of recipients (critical incidents)
		7. Perceived usefulness of materials	7. Reports of members
4. Provide funds and other resources in support of CE	Facilitate implementation of (specific) CE activities at state/local levels, especially activities involving BLIP and CC groups	1. Number and type of organizations providing such resources	1. Organizations' records; report of staff
		2. Amount of funds, resources provided	2. Same as 1
		3. Types of nonmonetary resources provided (e.g., personnel, facilities)	3. Same as 1
		4. Type of activities carried out with resources provided	4. Same as 1; reports of recipients
		5. Scope of activities carried out (e.g., number of schools, teachers, students involved; expected multiplier effect)	5. Report of recipients; recipients' records

Actor: State CE Advisory Council

Activity	Intended Outcome	Measures	Data Source
1. Assist in developing, reviewing and revising state plans	State plans reflect input of and are endorsed by state BLIP and CC groups	1. Extent of Council's involvement in preparing state plan	1. Section of plan describing prior activities and plan development; PL93-38 reports; report of state CEC, council chairperson; minutes of council meetings
		2. Extent of Council's involvement in reviewing/revising state plan	2. Minutes of council meetings; revised plan; reports by state CEC and council chairperson
		3. Endorsement of plan by Council	3. Examine plan; council minutes
		4. Endorsement of plan by other state BLIP and CC groups	4. Examine plan; report by state groups
2. Assist in developing and implementing procedures for allocating funds to IEAs/LEAs		1. Extent of involvement in developing IEA/LEA funding guidelines and procedures	1. Review of council meeting agendas and minutes; report by council and state staff; review of state CEC files
		2. Extent of involvement in reviewing proposals	2. Same as 1
		3. Extent of involvement in making funding decisions	3. Same as 1

Actor: IEAs

Activity	Intended Outcome	Measures	Data Source
1. Develop and maintain collaborative relationships in support of CE	BLIP and CC groups become full partners in implementation of CE at regional/ local levels	1. Number of BLIP and CC groups with formal relationships to IEA	1. IEA records; report of staff
		2. Nature of relationships	2. Same as 1
		3. Level of investment in CE of BLIP and CC groups (e.g., amount of staff time, funds, other resources)	3. BLIP and CC group records
2. Establish and operate CE Resource Centers	Access to high quality CE materials is enhanced and thus use in classrooms is enhanced	1. Number of materials contained in center	1. Center inventory records
		2. Extent to which materials are screened prior to inclusion	2. IEA records; report by staff
		3. Means by which individuals access materials (visit, remote checkout)	3. Center descriptive materials and procedures
		4. Provision for quick response to requests for materials	4. Same as 3; report by staff; report by users
		5. Number of individuals using center in given time period	5. Center records
		6. Extent materials obtained are used in planning or conducting class lessons	6. Observation of users' lesson plans; report by users

Actor: Local BLIP Groups

Activity	Intended Outcome	Measures	Data Source
1. Serve as resource persons in the classroom	Students and teachers understand and appreciate career implications of the subject matter	1. Number of BLIP and CC groups sending representatives to the classroom	1. School records of visitors, speakers, etc.
		2. Number of classes/schools receiving BLIP and CC personnel, by grade level	2. Same as 1
		3. Number of BLIP and CC visits in a year, by grade level	3. Same as 1
		4. Teachers' understanding of career implications of subject matter	4. Report by teachers; test the teachers
		5. Students' understanding of career implications of subject matter	5. Report by students, test of students
		6. Extent resource people discuss career implications of subject matter	6. Observation; report by teacher; report by resource person
2. Provide resources for field trips taken by students and/or educators	Students and educators become more aware of the world of paid employment	1. Number of BLIP groups offering to have field trips in a year	1. School records
		2. Number of BLIP groups having field trips	2. Same as 1
		3. Number of student field trips held in a year	3. Same as 1
		4. Number of teacher field trips held in a year	4. Same as 1

(continued)

Actor: Local BLIP Groups (continued)

Activity	Intended Outcome	Measures	Data Source
2. (continued)		5. How field trips enhanced teacher's awareness and changed his/her teaching 6. Students' understanding of world of paid employment	5. Critical incidents from teachers 6. Report by students; student tests
3. Serve as members of a Community Career Education Action Council	Ensure that BLIP groups work with educators in developing plans and providing for implementation of CE	1. Number of BLIP groups represented on CEAC 2. Number/percentage of official positions on CEAC (i.e., chairperson) held by BLIP group representatives 3. Number of BLIP groups expressing interest in serving on CEAC	1. CEAC membership list 2. CEAC membership/officer list 3. LEA records of CEAC establishment; report by local CEC
4. Serve as active participants in the education system's placement efforts	Students seeking full- or part-time jobs are able to find positions in local organizations that are compatible with their interests and abilities	1. Number of BLIP groups providing written materials describing opportunities and entrance requirements in their fields 2. Number of BLIP groups providing individuals to speak at career days, etc., to describe opportunities and entrance requirements in their fields 3. Number of BLIP groups providing schools with notices of openings	1. Examine materials in placement office 2. Agendas for career days, schedule of visitors, speakers in school 3. Notices posted in placement center

(continued)

Actor: Local BLIP Groups (continued)

Activity	Intended Outcome	Measures	Data Source
4. (continued)		4. Number of BLIP groups conducting on-campus interviews or screening, testing	4. Schedule of interviews conducted
		5. Number of BLIP groups hiring students for part-time positions	5. Records of student placements
		6. Number of BLIP groups hiring students for full-time positions	6. Same as 5
		7. Students' satisfaction with position	7. Report by students
		8. Students' performance on and retention in position	8. Report by students; report by employers; employers' personnel records

Actor: Local Civic/Community (CC) Groups

Activity	Intended Outcome	Measures	Data Source
1. Involve school-age youth in their organizational activities	Students understand role and functions of CC groups in our social/economic system and develop greater understanding of their own abilities, interests, and values	1. Number/percentage of students involved in CC group activities	1. Survey of students; examine records of student activities; report by or records of CC groups
		2. Number of CC groups sponsoring activities or programs for youth	2. School records; CC group records; community activity/program calendars
		3. Number of CC groups involving youth in their activities/programs	3. Same as 2
2. Develop and disseminate career education materials & resources	Students use materials and develop work skills, learn about various career opportunities and/or about their own abilities, interests, and values as they relate to career opportunities	1. Number of CC groups providing CE materials to school	1. Examine classroom materials
		2. Extent materials are designed for/amenable to infusion in subject area (e.g., are subject area skills, concepts also discussed?)	2. Examine materials
		3. Are materials available for full grade range (K-12)?	3. Same as 2
		4. Extent of availability (on request ...copies distributed for each student)	4. Report by teachers, administrators; information on acquisition procedures; report by CC groups

(continued)

Actor: Local Civic/Community (CC) Groups (continued)

Activity	Intended Outcome	Measures	Data Source
2. (continued)		5. Improvement in students' skills, knowledge	5. Teacher report; student assessment
		6. Extent materials are used in classroom or learning activities	6. Observation; report by teacher, students; examine lesson plans

Actor: Local CE Action Council

Activity	Intended Outcome	Measures	Data Source
1. Conduct needs assessment and develop comprehensive implementation plans	Needs as perceived by various actors at local level are identified and systematically addressed in plan for CE program	1. Needs of all major actors are determined	1. Needs assessment procedures
		2. Needs identified are expressed in "actable" terms	2. Report of results of needs assessment
		3. Extent that plan covers infusion, collaboration, guidance and counseling, and elimination of bias and stereotyping	3. Examine plan components
		4. Linkages between needs	4. Examine plan
		5. Plan provides for involvement of all major actors at local level	5. Same as 4
		6. Plan recommends specific activities for each group of actors	6. Same as 4

Actor: LEA-School Board

Activity	Intended Outcome	Measures	Data Source
1. Endorse the establishment and operation of local CE action council	CE action council is established to foster collaboration between community and educational system	1. Resolution calling for CE action council is adopted	1. School board minutes
		2. Specific responsibilities of and guidelines for council are established	2. Same as 1
		3. Council is formed	3. Local/LEA records
2. Fund CE activities, personnel, and resource development	CE activities are implemented in local schools	1. Amount of local funds committed for CE-related activities/resources	1. LEA budget
		2. Amount of LEA staff time designated for CE	2. Same as 1
		3. Number of individuals in LEA working on CE program	3. Same as 1
		4. Extent of "in-kind" support (facilities, etc.) made available for CE program	4. Same as 1

Actor: LEA-Administrators

Activity	Intended Outcome	Measures	Data Source
1. Provide a position of CE coordinator at the school system level and fill that position with a qualified person	CE coordinator is selected to facilitate implementation of CE	1. Number of local CE coordinator positions established 2. Amount of time taken to fill the positions 3. Amount of prior CE experience of person(s) selected	1. LEA records 2. Records of position announcement and hiring 3. Resumés of local CE coordinators
2. Provide arrangements for students to make maximum use of the institution's educational offerings for purposes of career exploration	Students are able to acquire educational experiences necessary for attaining designated learner outcomes	1. Extent to which all students have access to counseling and guidance, to career awareness and exploration activities, to vocational education courses, and/or to work experience programs 2. Availability of CE materials for students to check out 3. Availability to and awareness by students and parents of information about these arrangements	1. District policy statements; reports by faculty and staff; reports by students and parents 2. Examination of school libraries and counselors' offices, reports by staff 3. District statements regarding policies and procedures that are distributed to students and parents; reports by staff; reports by students, parents

(continued)

Actor: LEA-Administrators (continued)

Activity	Intended Outcome	Measures	Data Source
2. (continued)		4. Number/percentage of students utilizing or participating in career counseling, career awareness and exploration activities, vocational education courses, and work experience programs 5. Extent to which CE materials are used by students	4. Reports by staff; observation; reports by students 5. Signout records; observation; report by students
3. Make arrangements for students to receive elective educational credit for career awareness and exploration experiences taking place outside of school	Students are able to participate in out-of-school activities in which they can acquire information about various careers, as well as their own characteristics	1. Students are able to receive credit for out-of-school work experience 2. Students are able to receive credit for out-of-school career awareness/exploration activities 3. Number/percentage of students in district receiving credit for out-of-school (a) work experience and (b) career awareness/exploration activities	1. District policy guidelines 2. Same as 1 3. Student records

Actor: LEA-Local CEC

Activity	Intended Outcome	Measures	Data Source
1. Read the CE literature and become familiar with national/state trends in the area	Acquire sufficient knowledge of CE concept, objectives, and implementation strategies to be able to provide leadership at district level	1. Number of CE-related journals or newsletters subscribed to	1. Local CEC files and records; report by local CEC
		2. Number of journals/newsletters read regularly by CEC	2. Report by local CEC
		3. Number of CE meetings or conferences attended in past year	3. Travel records and daily calendar; report by CEC
		4. Number of other CE-related documents received/read in past year (e.g., holiday memos)	4. Examine files; report by CEC
		5. Extent of understanding of CE concept and objectives (can list major process and outcome objectives)	5. Report by local CEC
		6. Knows goals and general provisions of CE Incentive Act	6. Same as 5
		7. Knows existence, goals, provisions of state CE legislation	7. Same as 5
2. Organize and lead inservice training	District and building level staff understand CE concept and acquire knowledge/skills for infusing CE into curriculum	1. Number of inservice sessions conducted by CEC	1. District calendar, records
		2. Number of inservice sessions planned or organized by CEC	2. Same as 1
		3. Number of staff involved in CE inservices	3. District records

(continued)

Actor: LEA-Local CEC (continued)

Activity	Intended Outcome	Measures	Data Source
2. (continued)		4. Number/percentage of staff understanding CE concept (able to state goals, objectives)	4. Report by staff
		5. Number/percentage of staff infusing CE in classroom	
3. Communicate CE concepts and philosophy to all career education actors and general public	BLIP and CC groups and general public understand CE concept and philosophy and support implementation of CE in the schools	1. Number of meetings with and presentations to BLIP and CC groups by CEC on CE concept and philosophy	1. CEC calendar, records
		2. Number of articles published and other materials distributed to BLIP and CC groups; number distributed to general public	2. CEC records
		3. Number of presentations to general public groups	3. CEC calendar, records
		4. Number of local BLIP and CC groups familiar with CE concept and philosophy	4. Survey
		5. Number of local BLIP and CC groups publicly endorsing CE	5. Group records
		6. Number of BLIP and CC groups investing funds or other resources in CE	6. Same as 5
		7. Percentage of general public familiar with CE concept and philosophy	7. Survey

(continued)

Actor: LEA-Local CEC (continued)

Activity	Intended Outcome	Measures	Data Source
3. (continued)		8. Extent citizens call for or endorse CE in local schools	8. Examine testimony at school board and other public meetings, correspondence with LEA, schools; votes in local elections
4. Formulate and carry out a systematic plan for implementing CE in the community on an orderly and systematic basis	Using plan as a guiding tool, CE is implemented in community on an orderly and systematic basis	1. A local CE plan has been prepared	1. LEA records
		2. Plan provides for involvement of BLIP and CC groups	2. Examine plan
		3. Plan addresses levels K-adult	3. Same as 2
		4. Plan covers all subject/curriculum areas	4. Same as 2
		5. Plan provides for infusion of CE in classroom	5. Same as 2
		6. Plan provides for collaboration with local BLIP and CC groups	6. Same as 2
		7. Plan provides a timeline	7. Same as 2
		8. Plan is being implemented on schedule, according to timeline	8. Review of accomplishments against plan
		9. CE is being increasingly infused in the classroom	9. Examine instructional plans and materials; observation; report by teachers and students

(continued)

Actor: LEA-Local CEC (continued)

Activity	Intended Outcome	Measures	Data Source
4. (continued)		10. BLIP and CC groups collaborate with educators in implementing plan	10. Report by CEC; report by BLIP and CC groups; examine activity plans
5. Work closely with Community CE Action Council (CEAC) to gain acceptance in community for CE	Community (BLIP, CC, public) accept and endorse CE concept and philosophy	1. Number of times CEC meets with CEAC in year 2. Provide input to CEAC meeting agenda 3. Amount of informal communication with CEAC during year 4. Number of times CEAC input is sought in developing plans or carrying out activities 5. Number of times CEAC endorsement of plans or materials is sought and obtained	1. CEC calendar; CEAC agendas and minutes 2. CEAC records, agendas 3. Correspondence; report by CEC 4. Correspondence and records; report by CEC; report by CEAC 5. Correspondence and records; report by CEC; report by CEAC; examine plans/materials produced
6. Organize and lead efforts to assess needs for and evaluate the effectiveness of CE	Data on needs and effectiveness are used to refine plans, stimulate community support	1. Each group of major actors (e.g., BLIP and CC groups, educators, parents, students) was involved in needs assessment 2. Results were translated into action items	1. CEC records, needs assessment instruments 2. Report on results of needs assessment

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Actor: LEA-Local CEC (continued)

Activity	Intended Outcome	Measures	Data Source
6. (continued)		3. Results were used in modifying local CE plan(s)	3. Examine plans; minutes of meetings where plan revisions were discussed
		4. Data was obtained on CE activities being conducted	4. Evaluation instruments, report by CEC
		5. Quality of activities was assessed	5. Same as 4
		6. Outcomes for participants (teachers or students) were assessed	6. Same as 4
		7. Results were reported to community (BLIP and CC groups, parents, educators)	7. Distribution list for report; report by CEC
		8. Results were considered in modifying plan(s)	8. Revised plan; minutes of meeting where plan was revised
		9. Action implications of results were determined	9. Examine report of results

Actor: Teachers

Activity	Intended Outcome	Measures	Data Source
1. Allow students to actually engage in decision-making processes as a means of acquiring career decision-making skills	Students develop skills needed for making career decisions	1. Number of teachers providing opportunities for student decision-making in class	1. Teacher report; observation of teachers
		2. Number of incidents of student decision-making opportunity over the course of the year	2. Same as 1; student report
		3. Degree of student responsibility in decision-making (e.g., provide input vs. make choice; hypothetical vs. actual conditions)	3. Same as 2
		4. Extent students demonstrate decision-making skills	4. Teacher report; observation of students; student assessment
		5. Number of grade levels in which decision-making opportunities are introduced	5. Same as 2
		6. Extent decision-making opportunities are integrated with academic subject matter	6. Same as 1
2. Allow students to observe, study and discuss work values present among persons employed in various occupations	Students develop personally meaningful work values	1. Number of times teacher introduces concept of work values	1. Teacher report; observation of teacher; examine teacher's lesson plan
		2. Amount of discussion of various work values	2. Teacher report; observation of teacher

(continued)

Actor: Teachers (continued)

Activity	Intended Outcome	Measures	Data Source
2. (continued)		3. Extent students are asked/encouraged to examine own values	3. Same as 1
		4. Number of times students consider work values implied in hypothetical conditions	4. Same as 1
		5. Number of times students observe actual workers and identify implied work values	5. Same as 1
		6. Evidence that students can identify aspects of work that are most/least important to them	6. Student report, student assessment
		7. Extent that class discussion of values is integrated with academic subject matter	7. Same as 1
		8. Number of grade levels in which concept of work values is covered	8. Same as 1
3. Discuss basic nature of a variety of occupations and help students to understand educational requirements essential for success in each one	Students become familiar with characteristics and educational requirements of a wide variety of occupations	1. Number of teachers conducting or providing for discussion of occupations	1. Examine teacher lesson plans; report by teacher; observe teacher
		2. Number of times each teacher introduces discussion of occupations	2. Same as 1
		3. Number of occupations/occupational groups discussed in each class	3. Same as 1

(continued)

Actor: Teachers (continued)

Activity	Intended Outcome	Measures	Data Source
3. (continued)		4. Extent discussions cover (a) nature of occupation, and (b) educational requirements essential for success	4. Same as 1
		5. Evidence that students are able to describe nature and educational requirements of occupations discussed	5. Student assessment, report
		6. Extent discussions are integrated with academic subject matter	6. Same as 1
		7. Number of grade levels in which occupations are discussed	7. Same as 1
4. Provide information regarding the free enterprise system--including basic economics and the roles of business and organized labor	Students understand how free enterprise system functions and roles of business and labor	1. Number of teachers introducing discussion of free enterprise system	1. Examine lesson plans; report by teacher; observe teacher's instruction
		2. Number of teachers introducing or discussing basic economic concepts	2. Same as 1
		3. Number of grades in which free enterprise system and economic concepts are discussed	3. Same as 1
		4. Extent that discussions of economic system include roles of business and labor	4. Same as 1

(continued)

Actor: Teachers (continued)

Activity	Intended Outcome	Measures	Data Source
4. (continued)		5. Extent that discussion of free enterprise system and economic concepts is integrated into academic subject matter	5. Same as 1
		6. Extent of student understanding of free enterprise system and economic concepts covered	6. Student assessment
		7. Extent of discussion of free enterprise system and economic concepts (e.g., none; exclusively didactic, some discussion; students apply to specific problems, issues)	7. Same as 1
5. Encourage students to consider possible alternative career choices that may be possible and desirable for them	Students gain skills in evaluating career options and begin to identify groups of careers they might pursue	1. Number of teachers introducing topic of career options	1. Examine lesson plans, observe teacher; report by teacher, report by students
		2. Number of times each teacher introduces topic of career options	2. Same as 1
		3. Extent of coverage of topic (didactic; discussion; application to student's own situations)	3. Same as 1
		4. Number of career options students are asked to evaluate	4. Same as 1
		5. Does teacher encourage students to explore additional options?	5. Same as 1

(continued)

Actor: Teachers (continued)

Activity	Intended Outcome	Measures	Data Source
5. (continued)		6. Extent students are asked to evaluate various career options (number of dimensions along which they are evaluated)	6. Same as 1
		7. Number of career options students report having considered	7. Student report
		8. Degree to which students report having assessed specific career options	8. Same as 7
		9. Extent to which students can assess a specific career option	9. Same as 7; student assessment
6. Serve as models to motivate other teachers to become involved in CE	Number of teachers involved in CE in school/LEA increases each year	1. Number of times teacher describes CE activities to other faculty	1. Report by teacher, faculty; observation of faculty; faculty meeting minutes
		2. Number of times teacher has other faculty into her class to observe CE activities	2. Report by teacher, faculty; observation of classes
		3. Number of times teacher shares CE materials with other faculty	3. Same as 1
		4. Number of formal presentations to faculty/staff on CE activities (e.g., in workshop)	4. Workshop and meeting agendas

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(continued)

Actor: Teachers (continued)

Activity	Intended Outcome	Measures	Data Source
6. (continued)		5. Extent teacher calls for greater involvement in CE among other faculty	5. Observe faculty meetings; minutes of meetings; report by faculty, staff
		6. Increase in number of teachers including CE activities in their instruction	6. Teacher report; observation of teachers
7 Work with other teachers and administrators to develop comprehensive curricula infusing CE goals and activities	A plan for infusing CE throughout the K-12 program is available for teachers to use, resulting in widespread implementation of CE	1. CE concepts/skills are identified for each grade level	1. Examine curriculum plan
		2. CE concepts/skills are identified for each subject area or program component	2. Same as 1
		3. Specific activities or strategies for infusing CE in each grade/subject are suggested	3. Same as 1
		4. Strategies for assessing CE activities are suggested	4. Same as 1
		5. Number of teachers and administrators involved in developing curriculum	5. Report by administrators/teachers; "credits" in plan; records of meetings
		6. Extent CE curriculum is disseminated to teachers in school/district	6. Distribution lists and/or availability notices; report by teachers/administrators

(continued)

Actor: Teachers (continued)

Activity	Intended Outcome	Measures	Data Source
7. (continued)		7. Extent teachers are encouraged to use CE curriculum	7. Memos/other documents accompanying curriculum plan; report by teachers, administrators
		8. Extent teachers do use CE curriculum	8. Examine lesson plans; observe teachers; report by teachers
8. Illustrate ways in which subject matter being learned can be valuable to students in the productive use of leisure time	Students understand the leisure time implications/applications of their academic and non-academic subjects and develop skills in the productive use of leisure time	1. Number of teachers discussing leisure implications/applications of subject matter	1. Examine lesson plans; observe teachers; report by teachers, students
		2. Number of grade levels in which leisure implications/applications are discussed	2. Same as 1
		3. Number of subjects for which leisure implications/applications are discussed	3. Same as 1
		4. Extent of coverage given (e.g., teacher presentation only...class discussion...student application of ideas)	4. Same as 1

(continued)

Actor: Teachers (continued)

Activity	Intended Outcome	Measures	Data Source
8. (continued)		5. Frequency with which leisure implications/applications are discussed 6. Extent to which students can describe leisure implications/applications of subject matter	5. Same as 1 6. Student report; student assessment

Actor: Counselors

Activity	Intended Outcome	Measures	Data Source
1. Coordinate career education activities at the building level	Teachers, counselors, and administrators work together to implement CE throughout school	1. Extent to which counselors monitor the nature and extent of CE activities in the classroom	1. Counselor records; daily calendar; observe counselor's performance
		2. Extent to which counselors identify and disseminate appropriate CE resources and instructional materials to teachers	2. Same as 1; records of materials received /distributed; report by teachers
		3. Extent to which counselors consult with teachers on CE concept and implementation strategies	3. Same as 1; report by teachers
		4. Extent to which counselors organize or assist in development of comprehensive CE curriculum	4. Same as 1; "credits" on CE curriculum plan
		5. Extent to which counselors promote exchanges of information among teachers about CE activities	5. Same as 1; report by teachers
		6. Extent to which counselors attempt to assess CE implementation and accomplishments	6. Same as 1; examine CE assessment materials
2. Develop and maintain operational contacts with members of the BLIP community	BLIP groups become actively involved in planning for and implementation of local CE program	1. Number of BLIP groups contacted during course of year	1. Counselor's correspondence and communications files; report by counselor
		2. Number of BLIP groups with whom regular contact is maintained	2. Same as 1

(continued)

Actor: Counselors (continued)

Activity	Intended Outcome	Measures	Data Source
2. (continued)		3. Number of BLIP groups invited to participate in planning/implementation in some way	3. Same as 1
		4. Have counselors informed BLIP groups of purpose and objectives of school's CE program?	4. Same as 1
		5. Have counselors informed BLIP groups of different ways they might become involved in implementing CE program?	5. Same as 1
		6. Number/percentage of counselors maintaining contact with BLIP groups	6. Same as 1
3. Help members of the teaching faculty and parents to provide career guidance to students	Teachers and parents acquire skills and other resources to guide students/children in career exploration and decision-making	1. Number of formal presentations made to teachers concerning how to provide career guidance in the classroom	1. Counselors' records, daily calendar, report by counselors, teachers
		2. Number of informal contacts with individual teachers on this subject	2. Same as 1
		3. Number of career guidance materials identified and disseminated to teachers	3. Same as 1
		4. Number of parent education meetings held concerning career guidance	4. Same as 1; report by parents

(continued)

Actor: Counselors (continued)

Activity	Intended Outcome	Measures	Data Source
3. (continued)		5. Number of parent education materials identified and disseminated to parents	5. Same as 4
		6. Extent of dissemination (e.g., notice of availability vs. mass distribution)	6. Same as 4
		7. Number of informal contacts with parents	7. Same as 4
		8. Number/percentage of counselors engaged in these activities	8. Same as 4
4. Provide professional career guidance and counseling to students individually, in small groups, in the classroom	Assist students to explore career options, increase their own self-awareness and understanding, and acquire decision-making skills	1. Number of students seen individually for career guidance	1. Counselors' daily calendars, other records; observation of counselors' work; report by counselor
		2. Average number of sessions per student	2. Same as 1
		3. Number of small-group sessions held on career guidance	3. Same as 1
		4. Number of students receiving guidance via small groups	4. Same as 1
		5. Average number of times counselors visit classrooms to conduct guidance activities	5. Same as 1

(continued)

Actor: Counselors (continued)

Activity	Intended Outcome	Measures	Data Source
4. (continued)		6. Extent counselors assist students to enhance self-awareness and understanding	6. Report by counselor
		7. Extent counselors assist students to identify and assess alternative career options	7. Same as 6
		8. Students develop self-awareness and understanding	8. Student assessment
		9. Students develop skills in identifying and assessing career options	9. Same as 8
		10. Students acquire skill in decision-making	10. Same as 8
5. Assist students in the placement process, including both job placement and placement in postsecondary institutions	Students succeed in either obtaining a job or entering a postsecondary program when they leave high school	1. Notices of job openings or educational programs are posted where students can see them	1. Examine bulletin boards
		2. Such notices include application procedures and deadlines	2. Same as 1
		3. Counselors call specific opportunities to the attention of students who might be interested	3. Observe counselors; report by counselors
		4. Counselors assist students to identify and use resources and in other ways seek information on career or educational opportunities	4. Observe counselors; report by students, counselors

(continued)

Actor: Counselors (continued)

Activity	Intended Outcome	Measures	Data Source
5. (continued)		5. Counselors provide guidance or resource materials on job seeking and getting skills (e.g., preparing resumés, giving interviews)	5. Same as 4
		6. Counselors attempt to ensure that each student develops and pursues plans for getting a job or going on to postsecondary school following high school	6. Same as 4
6. Develop and promote a variety of educational and community actions to reduce race, sex, and physical/mental handicap stereotyping	Students pursue and obtain jobs or further schooling free from bias and/or stereotyping	1. Counselors assist in screening educational materials for freedom from bias/stereotyping	1. Examine materials; examine records of selection/review; report by counselors
		2. Special programs or presentations are held on nontraditional career paths	2. School calendar; report by counselors
		3. Counselors refer students to schools or jobs without bias or stereotyping	3. Examine student referrals; observe counselor; report by counselor
		4. Counselors recommend students for particular courses or programs without bias or stereotyping	4. Examine student class assignments and placements, observe counselor
		5. Efforts are made to educate the community about bias and stereotyping	5. Counselor records

Actor: Parents

Activity	Intended Outcome	Measures	Data Source
1. Actively support the infusion of CE into educational programs, K-adult	CE becomes infused in educational programs, K-adult	1. Percentage of election issues and candidates advocating CE passed/ elected	1. Community records of election issues, stands of various candidates, and outcomes
		2. Number of letters, calls, etc. to school board advocating implementation of CE	2. School board correspondence/communication files
		3. Number of requests to teachers/ administrators for CE in the classroom	3. Report by teachers and administrators
		4. Advocacy of CE revealed in parent needs assessments	4. Survey of parents
2. Serve as resource persons for career education in the classroom	Students learn about various careers and about adults' work roles	1. Number of parents serving as resource persons in classroom, by grade and subject area	1. Log or schedule of classroom activities
		2. Number/percentage of grades, subject areas utilizing parents as resource persons	2. Same as 1
		3. Extent to which distribution of parents/occupations counters traditional biases and stereotypes	3. Same as 1
		4. Extent to which parents discuss nature of work, entrance requirements, and rewards/costs	4. Observe parent presentation; report by teacher or student

(continued)

Actor: Parents (continued)

Activity	Intended Outcome	Measures	Data Source
2. (continued)		5. Number of occupations/occupational groups represented by parent resources 6. Extent of student information about occupations, entrance requirements, and rewards/costs	5. Same as 1 6. Student assessment
3. Participate as volunteers in career education efforts to help students engage in experiential learning in the community	Students participate in experiential activities and develop greater understanding/awareness of their abilities/interests/values	1. Number of parents involved as volunteers in providing/organizing experiential learning activities 2. Proportion of responsibility for experiential learning activity effort that is borne by parents 3. Number of students participating in experiential learning activities 4. Gains in students' self-understanding and self-awareness	1. Staffing records/volunteer logs 2. Staffing records 3. Attendance records 4. Student assessment
4. Help their children find and engage in career awareness and career exploration experiences	Students participate in experiences and acquire information about career and about themselves	1. Number of parents encouraging students to find and engage in career awareness and exploration experiences 2. Number of parents assisting students to find and engage in career awareness and exploration experiences	1. Report by parents; report by students 2. Same as 1

(continued)

Actor: Parents (continued)

Activity	Intended Outcome	Measures	Data Source
4. (continued)		3. Number of parents aware of opportunities for career awareness/exploration experiences for their children	3. Report by parents
		4. Number of students participating in career awareness and exploration experiences with and without parent assistance	4. Report by students; records of participation
		5. Increase in students' knowledge about careers	5. Student assessment
		6. Increase in students' knowledge about themselves	6. Same as 5
		7. Extent parents encourage children to explore nontraditional careers	7. Same as 1
5. Help children think about and discuss career decisions, including decisions regarding both educational and occupational choices	Students develop career decision-making skills and also greater self-awareness and understanding	1. Number of times parents discuss career plans with students	1. Report by parents, students
		2. Number of times parents discuss educational plans with students	2. Same as 1
		3. Extent discussion addresses reasons supporting particular plans	3. Same as 1
		4. Extent alternative educational/occupational options are considered and explored	4. Same as 1
		5. Extent nontraditional career paths are considered and explored	5. Same as 1

(continued)

Actor: Parents (continued)

Activity	Intended Outcome	Measures	Data Source
6. Help children understand and appreciate career implications of school subject matter	Students' academic skills improve	1. Number of times parents talk about career implications of school subject matter with their children	1. Report by parents; report by children
		2. Number of times parents demonstrate applications of school subject matter to work in and around the home	2. Same as 1
		3. Number of times parents demonstrate applications of school subject matter to their paid work	3. Same as 1
7. Help their children discover and utilize ways of making productive use of leisure time	Children develop skills in making productive use of leisure time	1. Number of times parents discuss ways of making productive use of leisure time	1. Report by students; report by parents
		2. Extent of parent modeling (proportion of leisure time spent productively)	2. Same as 1
		3. Extent of parental assistance to children in using leisure time productively	3. Same as 1
		4. Students express desire to use leisure time productively	4. Report by student
		5. Proportion of student's leisure time spent productively	5. Same as 4

(continued)

Actor: Parents (continued)

Activity	Intended Outcome	Measures	Data Source
8. Help their children think about and reflect on work values as part of their total system of personal values	Students develop a meaningful set of work values	1. Number of times parents discuss alternative work conditions and work roles with children	1. Report by parents, report by students
		2. Extent discussions focus on why some work conditions and work roles are especially desirable or undesirable	2. Same as 1
		3. Extent parents discuss with children the specific aspects of work/job that they feel are most/least important	3. Same as 1
9. Help their children develop attitudes devoid of bias with respect to race, sex, or physical/mental handicaps	Students develop attitudes devoid of bias	1. Extent parents discuss examples of bias/stereotyping with children	1. Report by students; report by parents
		2. Extent parents point out examples of nontraditional career patterns	2. Same as 1
		3. Extent parents discuss social and legal efforts to overcome effects of bias/stereotyping	3. Same as 1
		4. Extent parents discuss how bias/stereotyping serve to deny opportunities and rights to specific groups of individuals	4. Same as 1

(continued)

Actor: Parents (continued)

Activity	Intended Outcome	Measures	Data Source
9. (continued)		5. Extent parents discuss social and economic costs of perpetuating bias and stereotyping 6. Students exhibit attitudes toward careers that are free from bias	5. Same as 1 6. Student assessment

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